quarterly progress report in which the requirement becomes due, the Sinclair Refineries shall include the following:

- (1) Copies of the written Refinery-wide LDAR Program required by Paragraph 150;
- (2) A certification of the implementation of the lower leak definitions and monitoring frequencies in Paragraphs 159, 160, 161, 165 and 166;
- (3) A certification of the implementation of the "initial attempt at repair" program of Paragraph 164;
- (4) A certification of the implementation of QA/QC procedures for review of data generated by LDAR technicians as required by Paragraph 170;
- (5) An identification of the individual at each Refinery responsible for LDAR performance as required by Paragraph 150(g);
- (6) A certification of the development of a tracking program for new valves and pumps added during maintenance and construction as required by Paragraph 150;
- (7) A certification of the implementation of the calibration drift assessment procedures of Paragraph 174;
- (8) A certification of the implementation of the "delay of repair" procedures of Paragraph 175; and
- (9) A certification of the implementation of the "chronic leaker" program of Paragraph 177.
- b. Quarterly Progress Report for the First Calendar Quarter of Each Year. In the quarterly progress report that the Sinclair Refineries submit pursuant to Part XI for the first calendar quarter of each year, the Sinclair Refineries shall include an identification of each audit that was conducted pursuant to the requirements of Paragraphs 154-156 in the previous calendar year including an identification of the auditors, a summary of the audit results, and a summary of the actions that the Sinclair Refineries took or intend to take to correct all deficiencies identified in the audits.
- 179. Reports due under 40 C.F.R. § 63.654. In each report due under 40 C.F.R. § 63.654, the Sinclair Refineries shall include:

- (a) <u>Training</u>. Information identifying the measures that the Sinclair Refineries took to comply with the provisions of Paragraph 152; and
- (b) The following information on LDAR monitoring and repairs:
  - (1) the number of valves and pumps present in each process unit during the quarter;
  - (2) the number of valves and pumps monitored in each process unit;
  - (3) an explanation for missed monitoring if the number of valves and pumps present exceeds the number of valves and pumps monitored during the quarter;
  - (4) the number of valves and pumps found leaking;
  - (5) the number of "difficult to monitor" pieces of equipment monitored;
  - (6) a list of all equipment currently on the "delay of repair" list and the date each component was placed on the list;
  - (7) the number of repair attempts not completed promptly according to Paragraph 164 or completed within 5 days pursuant to Paragraph 163;
  - (8) the number of repairs not completed within thirty (30) days or placed on the delay of repair list according to Paragraph 163 and/or Paragraph 175; and
  - (9) the number of chronic leakers that do not get repaired according to the requirements of Paragraph 177.

### O. Incorporation of Consent Decree Requirements into Federally Enforceable Permits

on or Before December 31, 2007. By no later than June 30, 2008, the Sinclair Refineries will submit complete applications to the applicable state/local agency to incorporate the emission limits and standards required by the Consent Decree that are effective on or before December 31, 2007 into federally enforceable minor or major new source review permits or other permits that will ensure that the underlying emission limit or standard survives the termination of this Consent Decree. Following submission of the complete permit applications, the Sinclair Refineries will cooperate with the applicable state/local agency by promptly submitting to the applicable state/local agency all information that the applicable state/local agency seeks

following its receipt of the permit materials. Upon issuance of such permits or in conjunction with such permitting, the Sinclair Refineries will file any applications necessary to incorporate the requirements of those permits into the Title V permit. The Sinclair Refineries do not waive their right to appeal more stringent emission limits or standards than those required by this Consent Decree.

- 181. Obtaining Permit Limits For Consent Decree Emission Limits That Become Effective After December 31, 2007. As soon as practicable, but in no event later than ninety days after the effective date or establishment of any emission limits and standards under this Consent Decree, the Sinclair Refineries will submit applications to the applicable state/local agency to incorporate those emission limits and standards into federally enforceable minor or major new source review permits or other permits that will ensure that the underlying emission limit or standard survives the termination of this Consent Decree. Should the application be deemed incomplete by the applicable state/local agency, the Sinclair Refineries shall provide additional information within 60 days. Following submission of the complete permit application, the Sinclair Refineries will cooperate with the applicable state/local agency by promptly submitting to the applicable state/local agency all information that the applicable state/local agency seeks following its receipt of the permit materials. Upon issuance of such permit or in conjunction with such permitting, the Sinclair Refineries will file any applications necessary to incorporate the requirements of that permit into the Title V permit. The Sinclair Refineries do not waive their right to appeal more stringent emission limits or standards than those required by this Consent Decree.
- 182. Mechanism for Title V Incorporation. The Parties agree that the incorporation of any emission limits or other standards into the Title V permits for the Sinclair Refineries as required by Paragraphs 180 and 181 will be in accordance with the applicable state Title V rules. The Parties agree that incorporation of the requirements of this Decree may be by "amendment" under 40 C.F.R. § 70.7(d) and analogous state Title V rules, where allowed by state law.
- 183. <u>Construction Permits</u>. The Sinclair Refineries agree to use best efforts to obtain all required, federally enforceable permits and state/local agency permits for the construction of the pollution control technology and/or the installation of equipment necessary to implement the

affirmative relief and environmental projects set forth in this Part V and in Part VIII. To the extent that the Sinclair Refineries must submit permit applications for this construction or installation to the applicable state/local agency, the Sinclair Refineries will cooperate with the applicable state/local agency by promptly submitting to the applicable state/local agency all information that the applicable state/local agency seeks following its receipt of the permit application. This Paragraph is not intended to prevent the Sinclair Refineries from applying to the applicable state/local agency for or otherwise using an available pollution control project exemption.

184-190. Reserved.

#### VI. EMISSION CREDIT GENERATION.

The intent of this Part generally is to prohibit the Sinclair Refineries from using the emissions reductions ("CD Emissions Reductions") required from this Consent Decree, including the Emission Reductions required in Part V, for the purpose of netting reductions or emission offset credits, but also to describe the circumstances which are not prohibited.

- 191. <u>Prohibition</u>. The Sinclair Refineries will not generate or use any NOx, SO<sub>2</sub>, PM, VOC, or CO emissions reductions that result from any projects conducted or controls utilized to comply with this Consent Decree (including the controls required by Part VIII) as netting reductions or emission offset credits in any PSD, major non-attainment and/or minor New Source Review ("NSR") permit or permit proceeding.
- 192. <u>Outside the Scope of the Prohibition</u>. Nothing in this Part VI is intended to prohibit the Sinclair Refineries from requesting approval to:
  - (a) utilize or generate netting reductions or emission offset credits from refinery units that are covered by this Consent Decree to the extent that the proposed netting reductions or emission offset credits represent the difference between the emissions limitations set forth in this Consent Decree for these refinery units and the more stringent emissions limitations that the Sinclair Refineries may elect to accept for these refinery units in a permitting process;

- (b) utilize or generate netting reductions or emission offset credits for refinery units that are not subject to an emission limitation pursuant to this Consent Decree;
- (c) utilize or generate netting reductions or emission offset credits for Combustion Units on which Qualifying Controls, as defined in Paragraph 41 have been installed, provided that such reductions are not included in the Sinclair Refineries' demonstrations of compliance with the requirements of Paragraphs 42 and 45;
- (d) utilize emissions reductions from the installation of controls required by this Consent Decree in determining whether a project that includes both the installation of controls under this Consent Decree and other construction that occurs at the same time and is permitted as a single project triggers major New Source Review requirements; and/or
- (e) utilize CD Emission Reductions for the Sinclair Refineries' compliance with any rules or regulations designed to address regional haze or the non-attainment status of any area (excluding PSD and Non-Attainment New Source Review rules that apply. Notwithstanding the preceding sentence, the Sinclair Refineries will not trade or sell any CD Emissions Reductions.

### VII. STATE SUPPLEMENTAL ENVIRONMENTAL PROJECTS

- 193. In accordance with the requirements set forth in this Part VII and/or the applicable Appendices, the STRC will spend One Hundred Fifty Thousand Dollars (\$150,000) to implement the Supplemental Environmental Projects ("SEPs") for the State of Oklahoma described in Paragraphs 194-198.
- 194. Within 180 days after the entry of this Consent Decree, the STRC shall pay One Hundred Thousand Dollars (\$100,000) into the Municipal Trash Truck Diesel Retrofit Fund, to be established by the ODEQ for the purpose of funding the retrofit of Tulsa's municipal trash trucking fleet with controls to reduce emissions of PM.
- 195. Within 90 days after the date of entry of this Consent Decree, the ODEQ and STRC shall reach agreement on the expenditure of an additional Fifty Thousand Dollars (\$50,000) for an additional State Supplemental Environmental Project. The expenditure of the Fifty Thousand Dollars (\$50,000) for implementation of the agreed-on project shall be made within one year following agreement on the SEP. In the event that ODEQ and STRC do not reach agreement on an additional State SEP within 90 days after the date of entry of this Consent

Decree, or such longer period as ODEQ and STRC may agree to in writing, STRC shall pay ODEQ Fifty Thousand Dollars (\$50,000). The payment shall be made within 30 days of the deadline for reaching agreement on the additional state SEP (including any extensions agreed to by the parties) and will be made by certified or corporate check made payable to the "Oklahoma Department of Environmental Quality" and mailed to:

Oklahoma Department of Environmental Quality Finance and Human Resources Management ATTN: Accounts Receivable P.O. Box 2036 Oklahoma City, OK 73101

- 196. By signing this Consent Decree, the STRC certifies that it is not required, and has no liability under any federal, state, regional or local law or regulation or pursuant to any agreements or orders of any court, to perform or develop any of the projects identified in Paragraphs 194-195. The STRC further certifies that it has not applied for or received, and will not in the future apply for or receive: (i) credit as a Supplemental Environmental Project or other penalty offset in any other enforcement action for the projects set forth in Paragraphs 194-195; (ii) credit for any emissions reductions resulting from the projects set forth in Paragraphs 194-195 in any federal, state, regional or local emissions trading or early reduction program; or (iii) a deduction from any federal, state, regional, or local tax based on its participation in, performance of, or incurrence of costs related to the projects set forth in Paragraphs 194-195.
- 197. The STRC will include in each report required by Paragraph 200 a progress report for each SEP being performed pursuant to this Part VIII. In addition, the report required by Paragraph 200 of this Consent Decree for the period in which each project identified in Paragraphs 194-196 is completed will contain the following information with respect to such projects:
  - (a) A detailed description of each project as implemented;
  - (b) A brief description of any significant operating problems encountered, including any that had an impact on the environment, and the solutions for each problem;
  - (c) Certification that each project has been fully implemented pursuant to the provisions of this Consent Decree; and

- (d) A description of the environmental and public health benefits resulting from implementation of each project (including quantification of the benefits and pollutant reductions, if feasible).
- 198. The STRC agrees that in any public statements regarding these SEPs, the STRC must clearly indicate that these projects are being undertaken as part of the settlement of an enforcement action for alleged violations of the Clean Air Act and corollary state statutes.

### VIII. RESERVED

#### IX. REPORTING AND RECORDKEEPING

- 199. Within thirty (30) days after the end of each calendar quarter through 2007 (beginning with the first full calendar quarter after the Date of Entry of the Consent Decree) and semi-annually on January 31 and July 31 thereafter until termination of this Consent Decree, the Sinclair Refineries will submit to EPA and the Applicable Co-Plaintiff a progress report. The reports will contain the following information:
  - a. <u>General</u>. Each report will contain:
    - (1) a progress report on the implementation of the requirements of Part V (Affirmative Relief/Environmental Projects);
    - (2) a summary of the emissions data that is specifically required by the reporting requirements of Part V of this Consent Decree for the period covered by the report;
    - (3) a description of any problems anticipated with respect to meeting the requirements of Part V of this Consent Decree;
    - (4) a description of the status of all SEPs/BEPs (if any) being conducted under Part VII; and
    - (5) any such additional matters as the Sinclair Refineries believe should be brought to the attention of EPA and the Applicable Co-Plaintiff.
- b. <u>Emissions Data</u>. In each semi-annual report required to be submitted on July 31 of each year, the Sinclair Refineries shall provide a summary of annual emissions data for the prior calendar year. The summary shall include:

- (1) Estimation (in tons per year) of NOx, SO<sub>2</sub>, CO and PM emissions for all heaters and boilers;
- (2) Estimation (in tons per year) of NOx, SO2, CO and PM emissions for all FCCUs;
- (3) Estimation (in tons per year) of SO2 emissions from all Sulfur Recovery Plants;
- (4) Estimation (in tons per year) of SO2 emissions from each flare; and
- (5) The basis for each estimate required in this subparagraph (i.e., stack tests, CEMS, PEMS, etc.) and an explanation of methodology used to calculate the tons per year emitted.
- c. <u>Exceedances of Emission Limits</u>. In each semi-annual report, the Sinclair Refineries shall identify each exceedance of an emission limit required or established by this Consent Decree that occurred during the previous semi-annual period and, for any emission unit subject to a limit required or established by this Consent Decree that is monitored by a CEMS or PEMS, any periods of CEMS or PEMS downtime that occurred during the prior semi-annual period. For each exceedance and/or each period of CEMS or PEMS downtime, the Sinclair Refineries shall include the following information:
  - (1) For emissions units monitored with CEMS or PEMS:
    - (a) The duration of the exceedance(s) and/or CEMS or PEMS downtime expressed as a percentage of operating time in a calendar quarter; and
    - (b) Identification of each applicable rolling average period in which the Sinclair Refineries exceeded the limit and/or in which CEMS or PEMS downtime occurred, the date and time of the CEMS or PEMS downtime (if applicable), average emissions during the averaging period, and any identifiable cause of the exceedance (including startup, shutdown or malfunction) and/or CEMS or PEMS downtime; and
  - (2) For emissions units monitored through stack testing:
    - (a) A summary of the results of stack test; and
    - (b) A copy of the full stack test report.

d. <u>Certification</u>. Each report will be certified by either a person responsible for environmental management at the Sinclair Refineries or by a person responsible for overseeing implementation of this Decree across the Sinclair Refineries as follows:

I certify under penalty of law that this information was prepared under my direction or supervision by personnel qualified to properly gather and evaluate the information submitted. Based on my directions and after reasonable inquiry of the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

### X. CIVIL PENALTY

- 200. In satisfaction of the civil claims asserted by the United States and the Co-Plaintiffs in the complaint filed in this matter, within thirty (30) days of the Date of Entry of the Consent Decree, the Sinclair Refineries will pay penalties as follows:
  - (a) The STRC will pay a civil penalty of \$351,200.00 to the United States and \$757,300.00 to the State of Oklahoma (STRC will also perform SEPs at a cost of \$150,000.00 described in paragraphs 194 and 195);
  - (b) The SWRC will pay civil penalty of \$314,160.00 to the United States and \$395,890.00 to the State of Wyoming;
  - (c) The SCRC will pay a civil penalty of \$134,640.00 to the United States and \$496,810.00 to the State of Wyoming.
- 201. Payment of monies to the United States will be made by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing DOJ Case Number 90-5-2-1-07793, and the civil action case name and case number of this action in the District of Wyoming. The costs of such EFT will be the responsibility of the Sinclair Refineries. Payment will be made in accordance with instructions provided to the Sinclair Refineries by the Financial Litigation Unit of the U.S. Attorney's Office for the District of Wyoming. Of the total amount paid to the United States, \$35,000 will be directed to EPA's Hazardous Substance Superfund. Any funds received after 11:00 a.m. (EST) will be credited on the next business day. The Sinclair Refineries will provide notice of payment, referencing DOJ Case Number 90-5-2-1-07793, and the civil action case name and case number to the Department of Justice and to EPA, as provided in Paragraph 341 (Notice).

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202. Payment of the civil penalty owed to the State of Oklahoma under Paragraph 200(a) will be made by certified or corporate check made payable to the "Oklahoma Department of Environmental Quality" and mailed to:

Oklahoma Department of Environmental Quality Finance and Human Resources Management ATTN: Accounts Receivable P.O. Box 2036 Oklahoma City, OK 73101

203. Payment of the civil penalty owed to the State of Wyoming under Paragraphs 200(b) and (c) will be made by certified or corporate check made payable to the "Wyoming Department of Environmental Quality" and mailed to:

Wyoming Attorney General's Office Attn: Nancy Vehr 123 Capitol Building Cheyenne, WY 82002

- 204. The civil penalty set forth herein is a penalty within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and, therefore, the Sinclair Refineries will not treat these penalty payments as tax deductible for purposes of federal, state, regional, or local law.
- 205. Upon the Date of Entry of the Consent Decree, the Consent Decree will constitute an enforceable judgment for purposes of post-judgment collection in accordance with Federal Rule of Civil Procedure 69, the Federal Debt Collection Procedure Act, 28 U.S.C. §§ 3001-3308, and other applicable federal authority. The United States and the Co-Plaintiffs will be deemed judgment creditors for purposes of collecting any unpaid amounts of the civil and stipulated penalties and interest.

### XI. STIPULATED PENALTIES

206. For failure by a Sinclair refinery to comply with the terms of this Consent Decree, the relevant Sinclair Refinery determined to be in non-compliance will pay stipulated penalties to the United States and to the Applicable Co-Plaintiff for each failure as provided herein. Stipulated penalties will be calculated in the amounts specified in this Part. Stipulated penalties

under Paragraphs 11-14, 19-21, 31 and 32 will not start to accrue until there is non-compliance with the concentration-based, rolling average emission limits identified in those Paragraphs for five percent (5%) or more of the applicable unit's operating time during any calendar quarter. For those provisions where a stipulated penalty of either a fixed amount or 1.2 times the economic benefit of delayed compliance is available, the decision of which alternative to seek will rest exclusively within the discretion of the United States or the Applicable Co-Plaintiff. Where a single event triggers more than one stipulated penalty provision in this Consent Decree, only the provision containing the higher stipulated penalty will apply. For purposes of clarity, the stipulated penalties imposed under this Section XI shall be the sole responsibility of the Sinclair Refinery deemed to be in non-compliance. No stipulated penalty may be demanded of any Sinclair Refinery Company except for violations occurring at that Sinclair Refinery.

### A. Non-Compliance with Requirements for NOx Emissions Reductions from FCCUs

207. For failure to meet any emissions limit for NOx set forth in Paragraphs 11-14, per day, per unit: Seven Hundred and Fifty Dollars (\$750) for each calendar day in a calendar quarter on which the short-term rolling average exceeds the applicable limit; and Two Thousand Five Hundred Dollars (\$2,500) for each calendar day in a calendar quarter on which the specified 365-day rolling average exceeds the applicable limit.

208. For failure to install, certify, calibrate, maintain, and/or operate a NOx, O<sub>2</sub>, SO<sub>2</sub> and CO CEMS, COMS (AMP) and/or appropriate monitoring required under Paragraphs 16, 23, 34, 37, 38, 48, 49, 68.b and 75.a(3), per unit per monitored parameter per day:

Period of Delay

<del></del>	
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31st through 60th day after deadline	\$1,000
Beyond 60 <sup>th</sup> day after deadline	\$2,000 or an amount equal to 1.2 times the economic benefit of delayed compliance,

Penalty per day

whichever is greater

### B. Non-Compliance with Requirements for SO<sub>2</sub> Emissions Reductions from FCCUs

209. For each failure to meet SO<sub>2</sub> emission limits (final or interim) set forth in Paragraphs 19-21, per unit, per day: Seven Hundred and Fifty Dollars (\$750) for each calendar

day in a calendar quarter on which the specified 7-day rolling average exceeds the applicable limit; Two Thousand Five Hundred Dollars (\$2,500) for each calendar day in a calendar quarter on which the specified 365-day rolling average exceeds the applicable limit.

210. For failure to comply with the plan required by Paragraph 24 for operating the FCCUs in the event of a Hydrotreater Outage, per unit, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	\$250
31st through 60th day after deadline	\$1,000
Beyond 60 <sup>th</sup> day after deadline	\$2,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

### C. Non-Compliance with Requirements for PM Emissions Reductions from FCCUs

211. For each failure to meet applicable PM emission limits for the Sinclair Refinery's FCCUs as set forth in Paragraphs 26-28 per day, per unit: Three Thousand Dollars (\$3,000) for each calendar day in a calendar quarter on which the Sinclair Refinery exceeds the emission limit.

### D. Non-Compliance with Requirements for CO Emissions Reductions from FCCUs

212. For each failure to meet the applicable CO emission limits for the FCCUs as set forth in Paragraphs 31-32: Seven Hundred and Fifty Dollars (\$750) for each calendar day in a calendar quarter on which the specified 1-hour rolling average exceeds the applicable limit; and Two Thousand Five Hundred Dollars (\$2,500) for each calendar day in a calendar quarter on which the specified 365-day rolling average exceeds the applicable limit.

# E. Non-Compliance with Requirements for NSPS Applicability of FCCU Catalyst Regenerators

213. For failure to comply with NSPS Subparts A and J limits at each of the Sinclair Refineries' FCCU regenerators as required by Paragraph 35, per pollutant per day:

<u>Period of Non-Compliance</u> <u>Penalty per day</u>

1<sup>st</sup> through 30<sup>th</sup> day \$1,000 31<sup>st</sup> through 60<sup>th</sup> day \$2,000

Beyond 60<sup>th</sup> day \$3,000 or an amount equal to 1.2 times the

economic benefit of delayed compliance,

whichever is greater

### F. Non-Compliance with Requirements for NOx Emissions Reductions from Combustion Units

214. For failure to install Qualifying Controls on Combustion Units and/or to submit permit applications sufficient to comply with the requirements of Paragraphs 42, 45, 46 and/or 47, per day:

Period of Delay	Penalty per day
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$2,500
31st through 60th day after deadline	\$6,000
Beyond 60 <sup>th</sup> day after deadline	\$10,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

- 215. For each failure to meet NOx emission limits proposed by the Sinclair Refineries pursuant to Paragraph 42, per day, per unit: Five Hundred Dollars (\$500) for each calendar day in a calendar quarter on which the emissions exceed the applicable limit.
- 216. For failure to submit the required permit applications or amendments to incorporate the emissions limits established pursuant to Paragraph 42: Two Thousand Dollars (\$2,000) per permit application or amendment per month.

# G. Non-Compliance with Requirements for SO<sub>2</sub> Emissions Reductions from Heaters and Boilers.

217. For burning any fuel gas that contains H<sub>2</sub>S in excess of the applicable requirements of NSPS Subparts A and J in one or more heaters or boilers at the Sinclair Refineries after the date set forth in this Decree on which the respective heater or boiler becomes an "affected facility" subject to NSPS Subparts A and J, per event, per day in a calendar quarter:

Period of Non-Compliance	Penalty per day
1st through 30th day	\$2,500
Beyond 31st day	\$5,000 or an amount equal to 1.2 times the economic benefit of delayed compliance,

whichever is greater

218. For burning Fuel Oil in a manner inconsistent with the requirements of Paragraphs 56 and 57, per unit, per day:

Period of Non-Compliance	Penalty per day
1 <sup>st</sup> through 30 <sup>th</sup> day	\$1,750
Beyond 31st day	\$5,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

# H. Non-Compliance with Requirements for NSPS Applicability of Sulfur Recovery Plants

219. For failure to comply with the NSPS Subpart J emission limits at the Sinclair Refineries' SRPs pursuant to Paragraphs 67 and 68, per unit, per day in a calendar quarter:

Period of Non-Compliance	Penalty per day
1st through 30th day	\$1,000
31st through 60th day	\$2,000
Over 60 days	\$3,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

220. For failure to eliminate, control, and/or include and monitor all sulfur pit emissions in accordance with the requirements of Paragraph 69, per unit, per day:

Period of Non-Compliance	Penalty per day
1 <sup>st</sup> through 30 <sup>th</sup> day	\$1,000
31st through 60th day	\$1,750
Beyond 60 <sup>th</sup> day	\$4,000 or an amount equal to 1.2 times the economic benefit of delayed compliance whichever is greater

221. For failure to develop and comply with the Preventive Maintenance and Operation Plan as specified in Paragraph 70, per Refinery, per day:

Period of Delay or Non-Compliance	Penalty per day
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31st through 60th day	\$1,500
Over 60 days	\$2,000

### I. Non-Compliance with Requirements for NSPS Applicability of Flaring Devices

222. For failure to comply with the NSPS Subpart J emission limits at the Flaring Device, when and as required by Paragraphs 75 and 76, per day in a calendar quarter:

Period of Non-Compliance	Penalty per day
1 <sup>st</sup> through 30 <sup>th</sup> day	\$1,000
31st through 60th day	\$2,000
Over 60 days	\$3,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

223. For failure to comply with the compliance method selected by the Sinclair Refineries pursuant to Paragraph 75 for a Flaring Device listed on Appendix A after December 31, 2006:

Period of Delay	Penalty per day
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31st through 60th day	\$1,500
Over 60 days	\$2,000

## J. Non-Compliance with Requirements for Control of Acid Gas Flaring and Tail Gas Incidents

224. For AG Flaring Incidents and/or Tail Gas Incidents for which Section V.J. makes the Sinclair Refineries liable for stipulated penalties:

Tons Emitted in AG Flaring Incident	Length of Time from Commencement of Flaring within the AG Flaring Incident to Termination of Flaring within the AG Flaring Incident is 3 hours or less	Length of Time from Commencement of Flaring within the AG Flaring Incident to Termination of Flaring within the AG Flaring Incident is greater than 3 hours but less than or equal to 24 hours	Length of Time from Commencement of Flaring within the AG Flaring Incident to Termination of Flaring within the AG Flaring Incident is greater than 24 hours
5 Tons or Less	\$500 per ton	\$750 per ton	\$1000 per ton
Greater than 5 tons, but less than or equal to 15 tons	\$1,200 per ton	\$1,800 per ton	\$2,300 per ton, up to, but not exceeding, \$27,500 in any one calendar day
Greater than 15 tons	\$1,800 per ton, up to, but not exceeding, \$27,500 in any one calendar day	\$2,300 per ton, up to, but not exceeding, \$27,500 in any one calendar day	\$27,500 per calendar day

For purposes of calculating stipulated penalties pursuant to this Paragraph 224, only one cell within the matrix will apply. Thus, for example, for a Flaring Incident in which the flaring starts at 1:00 p.m. and ends at 3:00 p.m., and for which 14.5 tons of sulfur dioxide are emitted,

the penalty would be \$17,400 (14.5 x \$1,200); the penalty would not be \$13,900 [(5 x \$500) + (9.5 x \$1,200)]. For purposes of determining which column in the table set forth in this Paragraph applies under circumstances in which flaring occurs intermittently during a Flaring Incident, the flaring will be deemed to commence at the time that the flaring that triggers the initiation of a Flaring Incident commences, and will be deemed to terminate at the time of the termination of the last episode of flaring within the Flaring Incident. Thus, for example, for flaring within a Flaring Incident that (i) starts at 1:00 p.m. on Day 1 and ends at 1:30 p.m. on Day 1; (ii) recommences at 4:00 p.m. on Day 1 and ends at 4:30 p.m. on Day 1; (iii) recommences at 1:00 a.m. on Day 2 and ends at 1:30 a.m. on Day 2; and (iv) no further flaring occurs within the Flaring Incident, the flaring within the Flaring Incident will be deemed to last 12.5 hours – not 1.5 hours – and the column for flaring of "greater than 3 hours but less than or equal to 24 hours" will apply.

### K. Non-Compliance with Requirements for Acid Gas Flaring, Tail Gas and Hydrocarbon Flaring Incidents

225. For failure to timely submit any report required by Section V.J. and or V.K. or for submitting any report that does not substantially conform to its requirements:

Period of Delay	Penalty per day
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$750
31st through 60th day after deadline	\$1,500
Beyond 60 <sup>th</sup> day after deadline	\$3,000

226. For failure to complete any corrective action with respect to Acid Gas Flaring, Tail Gas or Hydrocarbon Flaring Incident under Paragraph 80 in accordance with the schedule for such corrective action proposed or agreed to by the Sinclair Refineries or imposed on the Sinclair Refineries pursuant to the dispute resolution provisions of this Decree (with any such extensions thereto as to which EPA and the Sinclair Refineries may agree in writing):

Period of Delay	Penalty per day
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$1,000
31st through 60th day after deadline	\$2,000
Beyond 60 <sup>th</sup> day after deadline	\$5,000 or 1.2 times the economic benefit resulting from the Sinclair Refinery's failure to complete corrective action
Beyond 60 <sup>th</sup> day	\$3,000

## L. <u>Non-Compliance with Requirements for Benzene Waste Operations NESHAP</u> <u>Program Enhancements</u>

227. For failure to comply with the requirements of Paragraphs 96 and 97, per day:

Period of Non-Compliance	Penalty per day
1 <sup>st</sup> through 30 <sup>th</sup> day	\$1,000
31st through 60th day	\$2,000
Beyond 60 <sup>th</sup> day	\$3,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

- 228. For failure to complete the BWON Compliance Review and Verification Reports as required by Paragraphs 98 and 99 and, if necessary, 100 and 101 Seven Thousand Five Hundred Dollars (\$7,500) per month.
- 229. For failure to submit a plan that provides for actions necessary to correct non-compliance as required by Paragraph 103 or 104 or for failure to implement the actions necessary to correct non-compliance and to certify compliance as required by Paragraph 105:

Period of Delay	Penalty per day
1st through 30th day after deadline	\$1,250
31st through 60th day after deadline	\$3,000
Beyond 60 <sup>th</sup> day	\$5,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

- 230. For failure to comply with the requirements set forth in Paragraphs 106-116 for use, monitoring and replacement of carbon canisters: One Thousand Dollars (\$1,000) per incident of non-compliance, per day.
- 231. For failure to submit or maintain any records or materials required by Paragraph 117: Two Thousand Dollars (\$2,000) per record or submission.
- 232. For failure to establish an annual review program to identify new benzene waste streams as required by Paragraph 118: Two Thousand Five Hundred Dollars (\$2,500) per month.
- 233. For failure to perform laboratory audits as required by Paragraphs 119-123: Five Thousand Dollars (\$5,000) per month, per audit.
- 234. For failure to implement the training requirements as set forth in Paragraphs 125-127: Ten Thousand Dollars (\$10,000) per quarter.
- 235. For failure to meet the applicable control standards of Subpart FF for waste management units handling non-exempt, non-aqueous wastes as required by Paragraph 129: Ten Thousand Dollars (\$10,000) per month per waste management unit.
- 236. For failure to submit any plans or other deliverables required by Paragraphs 131-138 or for failure to comply with the requirements of Paragraph 139, when applicable, for retaining third-party assistance: Ten Thousand Dollars (\$10,000) per month.
- 237. For failure to conduct sampling in accordance with the sampling plans required by Paragraphs 132-134: Five Thousand Dollars (\$5,000) per week, per stream, or Thirty Thousand Dollars (\$30,000) per quarter, per stream, whichever is greater, but not to exceed One Hundred and Fifty Thousand Dollars (\$150,000) per quarter.
- 238. For failure to conduct monthly visual inspections of all Subpart FF water traps as required by Paragraph 140(a): Five Hundred Dollars (\$500) per drain not inspected.
- 239. For failure to identify/mark segregated stormwater drains as required in Paragraph 140(b): One Thousand Dollars (\$1,000) per week, per drain.

- 240. For failure to monitor Subpart FF conservation vents as required by Paragraph 140(c): Five Hundred Dollars (\$500) per vent not monitored.
- 241. For failure to conduct monitoring of the controlled oil-water separators in benzene service as required by Paragraph 140(d): One Thousand Dollars (\$1,000) per month, per unit.
- 242. For failure to submit the written deliverables required by Paragraphs 141-142: One Thousand Dollars (\$1,000) per week, per deliverable.
- 243. If it is determined through federal or state investigation that the Sinclair Refineries have failed to include all benzene waste streams in its TAB calculation submitted pursuant to Paragraphs 98-101, the Sinclair Refineries will pay the following, per waste stream:

Waste Stream	Penalty
for waste streams < 0.03 Mg/yr	\$250
for waste streams between 0.03 and 0.1 Mg/yr	\$1,000
for waste streams between 0.1 and 0.5 Mg/yr	\$5,000
for waste streams $> 0.5 \text{ Mg/yr}$	\$10,000

# M. Non-Compliance with Requirements for Leak Detection and Repair Program Enhancements

- 244. For failure to develop an LDAR Program as required by Paragraph 150: Three Thousand Five Hundred Dollars (\$3,500) per week.
- 245. For failure to implement the training programs specified in Paragraph 152(a)-(c): Ten Thousand Dollars (\$10,000) per month, per program.
- 246. For failure to conduct any of the audits required by Paragraphs 153-158: Five Thousand Dollars (\$5,000) per month, per audit.
- 247. For failure to implement any actions necessary to correct non-compliance as required by Paragraph 158:

<u>Period of Delay</u> <u>Penalty per day</u>

1<sup>st</sup> through 30<sup>th</sup> day after deadline \$1,250

31<sup>st</sup> through 60<sup>th</sup> day after deadline \$3,000

Beyond 60<sup>th</sup> day \$5,000 or an amount equal to 1.2 times the

economic benefit of delayed compliance,

whichever is greater

248. For failure to perform monitoring utilizing the lower internal leak definitions as specified in Paragraphs 159-161: One Hundred Dollars (\$100) per component, but not greater than Ten Thousand Dollars (\$10,000) per month, per process unit.

- 249. For failure to repair and re-monitor leaks, as required by Paragraph 163, in excess of the lower leak definitions specified in Paragraphs 159-161: Five Hundred Dollars (\$500) per component, but not greater than Ten Thousand Dollars (\$10,000) per month.
- 250. For failure to implement the "initial attempt" repair program in Paragraph 164: One Hundred Dollars (\$100) per valve, but not greater than Ten Thousand Dollars (\$10,000) per month.
- 251. For failure to implement and comply with the LDAR monitoring program as required by Paragraphs 165 and 166: One Hundred Dollars (\$100) per component, but not greater than Ten Thousand Dollars (\$10,000) per month, per unit.
- 252. For failure to use dataloggers or maintain electronic data as required by Paragraphs 168 and 169: Five Thousand Dollars (\$5,000) per month.
- 253. For failure to implement the QA/QC procedures described in Paragraph 170: Ten Thousand Dollars (\$10,000) per month.
- 254. For failure to designate and/or maintain an individual as accountable for LDAR performance as required in Paragraph 171 or for failure to implement the maintenance tracking program in Paragraph 172: Thirty-Seven Hundred and Fifty Dollars (\$3,750) per week.

- 255. For failure to conduct the calibration drift assessments or remonitor valves and pumps based on calibration drift assessments in Paragraphs 173 and 174: One Hundred Dollars (\$100) per missed event.
- 256. For failure to comply with the requirements for repair set forth at Paragraphs 175 and 176: Five Thousand Dollars (\$5,000) per valve or pump, per incident of non-compliance.
- 257. For failure to comply with the requirement for chronic leakers set forth in Paragraph 177: Five Thousand Dollars (\$5,000) per valve.
- 258. For failure to submit any written deliverables required by Paragraphs 178 and 179: One Thousand Dollars (\$1,000) per week, per report.
- 259. If it is determined through a federal, state, regional, or local investigation that a Sinclair Refinery has failed to include any valves or pumps in its LDAR program, the Sinclair Refinery will pay One Hundred Seventy-Five Dollars (\$175) per component that they failed to include.

### N. Reserved.

### O. General Reporting Requirements

260. For each failure to submit a written deliverables (unless a more specific stipulated penalty applies), per day per deliverable:

Period of Delay	Penalty per day
1st through 30th day after deadline	\$200
31st through 60th day after deadline	\$500
Beyond 60th day	\$1,000

### P. Non-Compliance with Requirements Related to Incorporating Consent Decree Requirements into Federally-Enforceable Permits

261. For each failure to submit an application as required by Paragraph 180 or 181:

Period of Non-Compliance	Penalty per day
1st through 30th day after deadline	\$800
31st through 60th day after deadline	\$1,500
Beyond 60th day	\$3,000

# Q. Non-Compliance with Requirements Related to Supplemental/Beneficial Environmental Projects

262. (a) For failure to comply with any of the requirements of Paragraphs 193-198:

Period of Non-Compliance	Penalty per day
1st through 30th day after deadline	\$1,000
31st through 60th day after deadline	\$2,000
Beyond 60th day after deadline	\$5,000

(b) For failure to timely complete implementation of the SEPs/BEPs required by Paragraphs 194 or 195:

Period of Non-Compliance	Penalty per day
1st through 30th day after deadline	\$1,000
31st through 60th day after deadline	\$1,500
Beyond 60th day after deadline	\$2,000

### R. Non-Compliance with Requirements for Reporting and Recordkeeping

263. For failure to submit reports as required by Part V, VII and/or IX, per report, per day:

Period of Delay Penalty per day

1st through 30th day after deadline

\$300

31st through 60th day after deadline

\$1,000

Beyond 60th day

\$2,000

### S. Non-Compliance with Requirements for Payment of Civil Penalties

264. For the Sinclair Refinery's failure to pay the civil penalties as specified in Part X of this Consent Decree, the Sinclair Refineries will be liable for Fifteen Thousand Dollars (\$15,000) per day plus interest on the amount overdue at the rate specified in 28 U.S.C. § 1961(a).

### T. General Provisions Related to Stipulated Penalties

- 265. <u>Demand for Stipulated Penalties</u>. Each Sinclair Refinery will pay stipulated penalties upon written demand by the United States or the Applicable Co-Plaintiff by no later than sixty (60) days after the Sinclair Refinery receives such demand. Demand from one agency will be deemed a demand from all applicable agencies, but the agencies will consult with each other prior to making a demand. A demand for the payment of stipulated penalties will identify the particular violation(s) to which the stipulated penalty relates, the stipulated penalty amount that EPA or the Applicable Co-Plaintiff is demanding for each violation (as can be best estimated), the calculation method underlying the demand, and the grounds upon which the demand is based. After consultation with each other, the United States and the Applicable Co-Plaintiff may, in their unreviewable discretion, waive payment of any portion of stipulated penalties that may accrue under this Consent Decree.
- 266. Payment of Stipulated Penalties. Stipulated penalties owed by any Sinclair Refinery will be paid 50% to the United States and 50% to the Applicable Co-Plaintiff. Stipulated penalties owing to the United States of under Ten Thousand Dollars (\$10,000) will be paid by check and made payable to "U.S. Department of Justice," referencing DOJ Number 90-5-2-1-07793 and USAO File Number \_\_\_\_\_\_\_, and delivered to the U.S. Attorney's Office in the District of Wyoming, Stipulated penalties owing to the United States of Ten Thousand Dollars (\$10,000) or more and stipulated penalties owing to Co-Plaintiff Oklahoma or Wyoming will be paid in the manner set forth in Part X (Civil Penalty) of this Consent Decree.

- 267. <u>Stipulated Penalties Dispute</u>. Stipulated penalties will begin to accrue on the day after performance is due or the day a violation occurs, whichever is applicable, and will continue to accrue until performance is satisfactorily completed or until the violation ceases. However, in the event of a dispute over stipulated penalties, stipulated penalties will not accrue commencing upon the date that the relevant Sinclair Refinery files a petition with the Court under Paragraph 287 if the Sinclair Refinery has placed the disputed amount demanded in a commercial escrow account with interest. If the dispute thereafter is resolved in the relevant Sinclair Refinery's favor, the escrowed amount plus accrued interest will be returned to the Sinclair Refinery; otherwise, EPA and the Applicable Co-Plaintiff will be entitled to the amount that was determined to be due by the Court, plus the interest that has accrued in the escrow account on such amount.
- 268. The United States and the Co-Plaintiffs reserve the right to pursue any other non-monetary remedies to which they are legally entitled, including but not limited to, injunctive relief, for the Sinclair Refinery's violations of this Consent Decree. Where a violation of this Consent Decree is also a violation of the Clean Air Act, its regulations, or a federally-enforceable state law, regulation, or permit, the United States will not seek civil penalties where it already has demanded and secured stipulated penalties from the Sinclair Refinery for the same violations nor will the United States demand stipulated penalties from the Sinclair Refinery for a Consent Decree violation if the United States has commenced litigation under the Clean Air Act for the same violations. Where a violation of this Consent Decree is also a violation of state law, regulation or a permit, the Applicable Co-Plaintiff will not seek civil penalties where it already has demanded and/or secured stipulated penalties from the Sinclair Refinery for the same violations, nor will the Applicable Co-Plaintiff demand stipulated penalties from the Sinclair Refinery for a Consent Decree violation if the Applicable Co-Plaintiff has commenced litigation under the Clean Air Act for the same violations.

### XII. INTEREST

269. The Sinclair Refineries will be liable for interest on the unpaid balance of the civil penalty specified in Part X, and for interest on any unpaid balance of stipulated penalties to be paid in accordance with Part XI. All such interest will accrue at the rate established pursuant to 28 U.S.C. § 1961(a) -- i.e., a rate equal to the coupon issue yield equivalent (as determined by

the Secretary of Treasury) of the average accepted auction price for the last auction of 52-week U.S. Treasury bills settled prior to the Date of Lodging of the Consent Decree. Interest will be computed daily and compounded annually. Interest will be calculated from the date payment is due under the Consent Decree through the date of actual payment. For purposes of this Paragraph 269, interest pursuant to this Paragraph will cease to accrue on the amount of any stipulated penalty payment made into an interest bearing escrow account as contemplated by Paragraph 267 of the Consent Decree. Monies timely paid into escrow will not be considered to be an unpaid balance under this Part.

### XIII. RIGHT OF ENTRY

270. Any authorized representative of EPA or the Applicable Co-Plaintiff, upon presentation of credentials, will have a right of entry upon the premises of the facilities of the Sinclair Refineries at any reasonable time for the purpose of monitoring compliance with the provisions of this Consent Decree, including inspecting plant equipment and systems, and inspecting all records maintained by the Sinclair Refineries required by this Consent Decree or deemed necessary by EPA or the Applicable Co-Plaintiff to verify compliance with this Consent Decree. Except where other time periods specifically are noted, the Sinclair Refineries will retain such records for the period of the Consent Decree. Nothing in this Consent Decree will limit the authority of EPA or the Applicable Co-Plaintiff to conduct tests, inspections, or other activities under any statutory or regulatory provision.

#### XIV. FORCE MAJEURE

271. If any event occurs or fails to occur which causes or may cause a delay or impediment to performance in complying with any provision of this Consent Decree, STRC, SWRC or SCRC will notify EPA and the Applicable Co-Plaintiff in writing as soon as practicable, but in any event within twenty (20) business days of the date when the Sinclair Refineries first knew of the event or should have known of the event by the exercise of due diligence. In this notice, the relevant Refinery will specifically reference this Paragraph and describe the anticipated length of time the delay may persist, the cause or causes of the delay, and the measures taken or to be taken by the Refinery to prevent or minimize the delay and the schedule by which those measures will be implemented. Each Refinery will take all reasonable

steps to avoid or minimize such delays. The notice required by this Part will be effective upon the mailing of the same by overnight mail or by certified mail, return receipt requested, to the Applicable EPA Regional Office as specified in Paragraph 341.

- 272. Failure by the STRC, SWRC or SCRC to substantially comply with the notice requirements of Paragraph 271 will render this Part XIV voidable by the United States, in consultation with the Applicable Co-Plaintiff, as to the specific event for which the relevant Refinery has failed to comply with such notice requirement, and, if voided, is of no effect as to the particular event involved.
- 273. The United States, after consultation with the Applicable Co-Plaintiff, will notify the relevant Refinery in writing regarding its claim of a delay or impediment to performance within forty-five (45) days of receipt of the *force majeure* notice provided under Paragraph 271.
- 274. If the United States, after consultation with the Applicable Co-Plaintiff, agrees that the delay or impediment to performance has been or will be caused by circumstances beyond the control of the relevant Refinery including any entity controlled by the Refinery and that the Refinery could not have prevented the delay by the exercise of due diligence, the appropriate Parties will stipulate in writing to an extension of the required deadline(s) for all requirement(s) affected by the delay by a period equivalent to the delay actually caused by such circumstances. Such stipulation will be treated as a non-material modification to the Consent Decree pursuant to Paragraph 345. The relevant Refinery will not be liable for stipulated penalties for the period of any such delay.
- 275. If the United States, after consultation with the Applicable Co-Plaintiff, does not accept the Refinery's claim of a delay or impediment to performance, the relevant Refinery must submit the matter to the Court for resolution to avoid payment of stipulated penalties, by filing a petition for determination with the Court by no later than forty-five (45) days after receipt of the notice in Paragraph 273. Once the Refinery has submitted this matter to the Court, the United States and the Applicable Co-Plaintiff will have forty-five (45) business days to file their responses to the petition. If the Court determines that the delay or impediment to performance has been or will be caused by circumstances beyond the control of the relevant Refinery including any entity controlled by the Refinery and that the delay could not have been prevented

by the Refinery by the exercise of due diligence, the relevant Refinery will be excused as to that event(s) and delay (including stipulated penalties), for a period of time equivalent to the delay caused by such circumstances.

- 276. Each Refinery will bear the burden of proving that any delay of any requirement(s) of this Consent Decree was caused by or will be caused by circumstances beyond its control, including any entity controlled by it, and that it could not have prevented the delay by the exercise of due diligence. Each Refinery will also bear the burden of proving the duration and extent of any delay(s) attributable to such circumstances. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date or dates.
- 277. Unanticipated or increased costs or expenses associated with the performance of a Refinery's obligations under this Consent Decree will not constitute circumstances beyond its control, or serve as the basis for an extension of time under this Part XIV.
- 278. Notwithstanding any other provision of this Consent Decree, the Parties do not intend that a Refinery's serving of a *force majeure* notice or the Parties' inability to reach agreement will cause this Court to draw any inferences nor establish any presumptions adverse to any Party.
- 279. As part of the resolution of any matter submitted to this Court under this Part XIV, the appropriate Parties by agreement, or the Court, by order, may in appropriate circumstances extend or modify the schedule for completion of work under the Consent Decree to account for the delay in the work that occurred as a result of any delay or impediment to performance agreed to by the United States or approved by this Court. The Refinery will be liable for stipulated penalties for their failure thereafter to complete the work in accordance with the extended or modified schedule.

### XV. RETENTION OF JURISDICTION/DISPUTE RESOLUTION

280. This Court will retain jurisdiction of this matter for the purposes of implementing and enforcing the terms and conditions of the Consent Decree and for the purpose of adjudicating all disputes of the Consent Decree between the United States and the Co-Plaintiffs

and the Sinclair Refineries that may arise under the provisions of the Consent Decree, until the Consent Decree terminates in accordance with Part XVIII of this Consent Decree.

- 281. The dispute resolution procedure set forth in this Part XV will be available to resolve any and all disputes arising under this Consent Decree, provided that the Party making such application has made a good faith attempt to resolve the matter with the other Party.
- 282. The dispute resolution procedure required herein will be invoked upon the giving of written notice by one of the Parties to this Consent Decree to another advising the other appropriate Party(ies) of a dispute pursuant to this Part XV. The notice will describe the nature of the dispute, and will state the noticing Party's position with regard to such dispute. The Party or Parties receiving such notice will acknowledge receipt of the notice and the Parties will expeditiously schedule a meeting to discuss the dispute informally.
- 283. Disputes submitted to dispute resolution will, in the first instance, be the subject of informal negotiations between the Parties. Such period of informal negotiations will not extend beyond ninety (90) calendar days from the date of the first meeting between representatives of the Parties, unless the Parties agree in writing that this period should be extended. Failure by the parties to extend the informal negotiation period in writing will not terminate the informal negotiation period provided that the parties are continuing to negotiate in good faith.
- 284. Informal negotiations will cease upon either: (a) the Sinclair Refinery's submission of a request to the United States and the Applicable Co-Plaintiff of a written summary of its/their position regarding the dispute; or (b) the United States' and/or the Applicable Co-Plaintiff's submission to the Sinclair Refinery of a written summary of its/their position.
- 285. Under the circumstances of Paragraph 284(a), if the United States and/or the Applicable Co-Plaintiff respond to the Sinclair Refinery's request within sixty (60) days of receipt, then the position advanced by the United States and/or the Applicable Co-Plaintiff, as applicable, will be considered binding unless, within sixty (60) calendar days of the Sinclair Refinery's receipt of the written summary, the Sinclair Refinery files with the Court a petition

which describes the nature of the dispute. The United States or the Applicable Co-Plaintiff will respond to the petition within sixty (60) days of filing. In resolving a dispute between the parties under these circumstances, the position of the United States and the Applicable Co-Plaintiff will be upheld if supported by substantial evidence in the administrative record, which may be supplemented for good cause shown.

- 286. Under the circumstances of Paragraph 284(a), if the United States and/or the Applicable Co-Plaintiff do not respond to the Sinclair Refinery's request for a written summary within sixty (60) days of receipt, then the Sinclair Refinery will file with the Court a petition which describes the nature of the dispute within one-hundred five (105) days after submitting the initial request to the United States and the Applicable Co-Plaintiff. Applicable principles of law will govern the resolution of the dispute.
- 287. Under the circumstances of Paragraph 284(b), the position advanced by the United States and/or the Applicable Co-Plaintiff, as applicable, will be considered binding unless, within sixty (60) calendar days of the Sinclair Refinery's receipt of the written summary, the Sinclair Refinery files with the Court a petition which describes the nature of the dispute. The United States or the Applicable Co-Plaintiff will respond to the petition within sixty (60) days of filing. In resolving a dispute between the parties under these circumstances, the position of the United States and the Applicable Co-Plaintiff will be upheld if supported by substantial evidence in the administrative record, which may be supplemented for good cause shown.
- 288. In the event that the United States and the Applicable Co-Plaintiff make differing determinations or take differing actions that affect the Sinclair Refinery's rights or obligations under this Consent Decree, the final decisions of the United States will take precedence.
- 289. Where the nature of the dispute is such that a more timely resolution of the issue is required, the time periods set forth in this Part XV may be shortened upon motion of one of the Parties to the dispute.
- 290. The Parties do not intend that the invocation of this Part XV by a Party cause the Court to draw any inferences nor establish any presumptions adverse to either Party as a result of invocation of this Part.

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291. As part of the resolution of any dispute submitted to dispute resolution, the Parties, by agreement, or this Court, by order, may, in appropriate circumstances, extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of dispute resolution. The Sinclair Refinery will be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.

### XVI. EFFECT OF SETTLEMENT

- 292. <u>Definitions</u>. For purposes of Part XVI, the following definitions apply:
- a. "Applicable NSR/PSD Requirements" shall mean: PSD requirements at Part C of Subchapter I of the Act, 42 U.S.C. § 7475, and the regulations promulgated thereunder at 40 C.F.R. § 52.21; "Plan Requirements for Non-Attainment Areas" at Part D of Subchapter I of the Act, 42 U.S.C. §§ 7502-7503 and the regulations promulgated thereunder at 40 C.F.R. §§ 51.165 (a) and (b); Title 40, Part 51, Appendix S; and 40 C.F.R. § 52.24; any applicable, federally-enforceable state, regional, or local regulations that implement, adopt, or incorporate the specific federal regulatory requirements identified above; Any applicable state, regional, or local regulations enforceable by Plaintiff-Intervenors that implement, adopt, or incorporate the specific federal regulatory requirements identified above.
- b. "Applicable NSPS Subparts A and J Requirements" shall mean the standards, monitoring, testing, reporting and recordkeeping requirements, found at 40 C.F.R. §§ 60.100 through 60.109 (Subpart J), relating to a particular pollutant and a particular affected facility, and the corollary general requirements found at 40 C.F.R. §§ 60.1 through 60.19 (Subpart A) that are applicable to any affected facility covered by Subpart J.
- c. "Post-Lodging Compliance Dates" shall mean any dates in this Part XVI after the Date of Lodging. Post-Lodging Compliance Dates include dates certain (e.g., "December 31, 2004"), dates after Lodging represented in terms of "months after Lodging" (e.g., "Twelve Months after the Date of Lodging"), and dates after Lodging represented by actions taken (e.g., "Date of Certification"). The Post-Lodging Compliance Dates represent the dates by which work is required to be completed or an emission limit is required to be met under the applicable provisions of this Consent Decree.

### 293-313. Reserved.

- 314. <u>Liability Resolution For Specified Notices of Violation</u>. Defendants' performance of the obligations set forth in Paragraphs 200 205 (Civil Penalty) of this Consent Decree shall fully satisfy all civil liability of the Defendant to the United States and Plaintiff-Intervenors for the violations alleged in the notices of violation identified in this Paragraph through the date of lodging of the Consent Decree. Nothing in this Paragraph is intended, nor shall be construed, to operate in any way to resolve any other potential liability of the Defendant.
- a. State of Wyoming Notices of Violation: NOV No. 3366-02 issued on 5/1/02; NOV No. 3426-02 issued on 11/12/02; and NOV No. 3368-02 issued on 5/21/02.
- b. State of Oklahoma Notices of Violation: NOV No. 02-AQN-058 issued on 06/18/02; NOV No. 04-AQN-041 issued on 01/07/04; NOV No. 05-AQN-028 issued on 08/30/04; NOV No. 05-AQN-034 issued on 12/6/04; NOV No. 05-AQN-096 issued on 06/09/05; NOV No. 06-AQN-003 issued on 07/29/05.
- 315. <u>Liability Resolution Regarding the Applicable NSR/PSD Requirements</u>. With respect to emissions of the following pollutants from the following units, entry of this Consent Decree shall resolve all civil liability of the STRC, SWRC and SCRC and Sinclair Oil Corporation to the United States and the Plaintiff-Intervenors: (1) for violations of the Applicable NSR/PSD Requirements, resulting from construction or modification of the following units that occurred prior to the Date of Lodging of the Consent Decree, that commenced and ceased prior to the Date of Lodging of the Consent Decree; and (2) for any violations of the Applicable NSR/PSD Requirements, resulting from pre-Lodging construction or modification of the following units, that commenced prior to the Date of Lodging and continued up to the following dates:

Refinery/Unit	<u>Pollutant</u>	<u>Date</u>
Casper FCCU	NOx	December 31, 2009
	$SO_2$	December 31, 2009
Sinclair FCCU	NOx	March 31, 2010
	SO <sub>2</sub>	December 31, 2009
Tulsa FCCU	NOx	December 31, 2009
	$SO_2$	December 31, 2009
All Facilities		
Heaters and boilers listed in Appendix B	ŅОх	Later of the Date of Lodging or the installation of Qualifying Controls
Heaters and boilers not listed in Appendix B	NOx	Date of Lodging
All heaters and boilers	$SO_2$	Date of Lodging

- 316. <u>Liability Resolution for PM Under the Applicable NSR/PSD Requirements</u>. If and when the STRC, SCRC and/or the SWRC accept an emission limit of 0.5 pound PM per 1000 pounds of coke burned on a 3-hour average basis and demonstrate compliance by conducting a 3-hour performance test representative of normal operating conditions for PM emissions at the Tulsa, Casper and/or Sinclair Wyoming FCCUs, then all civil liability of the refinery accepting the limitation to the United States and the Plaintiff-Intervenors shall be resolved for violations of the Applicable NSR/PSD Requirements relating to PM emissions at the relevant Refinery resulting from construction or modification of the FCCU for that Refinery that occurred prior to the Date of Lodging of the Consent Decree that either ceased prior to the Date of Lodging of the Consent Decree or continued up to the date on which the Refinery demonstrates compliance with such PM emission limit for that Refinery.
- 317. <u>Liability Resolution for CO Under the Applicable NSR/PSD Requirements</u>. If and when a Sinclair Refinery accepts an emission limit of 100 ppmvd of CO at 0% O<sub>2</sub> on an 365-

day rolling average basis and demonstrates compliance using CEMS at the relevant Refinery, then all civil liability of that Sinclair Refinery to the United States and the Plaintiff-Intervenors shall be resolved for violations of the Applicable NSR/PSD Requirements relating to CO emissions at the relevant Refinery resulting from construction or modification of the FCCU for that Refinery that occurred prior to the Date of Lodging of the Consent Decree and that either ceased prior to the Date of Lodging or continued up to the date on which the Sinclair Refinery demonstrates compliance with such CO emission limit for that Refinery.

- Against Can Be Rendered Void. Notwithstanding Paragraph 315, the release of liability by the United States and the Plaintiff-Intervenors to the Sinclair Refineries for violations of the Applicable NSR/PSD Requirements during the period between the Date of Lodging of the Consent Decree and the Post-Lodging Compliance Dates shall be rendered void with respect to any Sinclair Refinery that materially fails to comply with the obligations and requirements of Paragraphs 11-14 and 19-21; provided however, that the release identified above shall not be rendered void if the Sinclair Refinery remedies such material failure and pays any stipulated penalties due as a result of such material failure. The voidance of the release of liability with respect to one Sinclair Refinery shall not affect the release of liability with respect to any other Sinclair Refinery.
- 319. Exclusions from Release Coverage: Construction and/or Modification Not Covered. Notwithstanding Paragraphs 315-317, nothing in this Consent Decree precludes the United States and/or the Plaintiff-Intervenors from seeking from the Sinclair Refineries injunctive relief, penalties or other appropriate relief for violations by the Sinclair Refineries of the Applicable NSR/PSD Requirements resulting from construction or modification that: (i) commenced prior to the Date of Lodging of the Consent Decree for pollutants or units not covered by the Consent Decree; or (ii) commences after the Date of Lodging of the Consent Decree.
- 320. <u>Evaluation of Applicable PSD/NSR Requirements Must Occur</u>. Increases in emissions from units covered by this Consent Decree, where the increases result from the Post-Lodging construction or modification of any units within the Sinclair Refineries, are beyond the

scope of the release in Paragraphs 315-317, and the Sinclair Refineries must evaluate any such increases in accordance with the Applicable PSD/NSR Requirements.

321. New Source Performance Standards Subparts A and J-Resolution of Liability. Entry of this Consent Decree shall resolve all civil liability of the Sinclair Refineries to the United States and the Plaintiff-Intervenors for violations of the Applicable NSPS Subparts A and J Requirements, arising from emissions of the following pollutants from the following units, from the date that the claims of the United States and the Plaintiff-Intervenors accrued through the following dates:

<u>Unit</u>	Pollutant	<u>Date</u>
Casper FCCU	SO2 PM, CO and Opacity	December 31, 2009 Date of Lodging
Sinclair FCCU	SO2 PM, CO and Opacity	December 31, 2009 Date of Lodging
Tulsa FCCU	SO2 PM, CO and Opacity	December 31, 2009 Date of Lodging
All Refineries	·	
All heaters and boilers	SO <sub>2</sub>	Date of Lodging (or Date in Appendix B if other than Date of Lodging)
All SRPs	$SO_2$	Date of Lodging
All Flaring and Fuel Gas and Combustion Devices	$\mathrm{SO}_2$	Date of Lodging

Agency Ag

stipulated penalties due as a result of such material failure. The voidance of the release of liability with respect to one Sinclair Refinery shall not affect the release of liability with respect to any other Sinclair Refinery.

- 323. <u>Prior NSPS Applicability Determinations</u>. Nothing in this Consent Decree shall affect the status of any FCCU, fuel gas combustion device, or sulfur recovery plant currently subject to NSPS as previously determined by any federal or state or any applicable permit.
- 24. LDAR and Benzene Waste NESHAP Resolution of Liability. Entry of this Consent Decree shall resolve all civil liability of the Sinclair Refineries to the United States and the Plaintiff-Intervenors for violations of the following statutory and regulatory requirements that (1) commenced and ceased prior to the Date of Entry of the Consent Decree; and (2) commenced prior to the Date of Entry of the Consent Decree and continued past the Date of Entry, provided that the events giving rise to such violations are identified and addressed by the Sinclair Refineries as required under Paragraphs 154 and 158 for LDAR requirements and under Paragraphs 98-105 (if applicable) for Benzene Waste NESHAP requirements:
  - a. <u>LDAR</u>. For all equipment in light liquid service and gas and/or vapor service, the LDAR requirements promulgated pursuant to Sections 111 and 112 of the Clean Air Act, and codified at 40 C.F.R. Part 60, Subparts VV and GGG; 40 C.F.R. Part 61, Subparts J and V; and 40 C.F.R. Part 63, Subparts F, H, and CC;
  - b. <u>Benzene Waste NESHAP</u>. The National Emission Standard for Benzene Waste Operations, 40 C.F.R. Part 61, Subpart FF, promulgated pursuant to Section 112(e) of the Act, 42 U.S.C. § 7412(e);
  - c. Any applicable, federally-enforceable state regulations that implement, adopt, or incorporate the specific federal regulatory requirements identified in this Paragraph; and
  - d. Any applicable state regulations enforceable by the Plaintiff-Intervenors that implement, adopt, or incorporate the specific federal regulatory requirements identified in this Paragraph, including O.A.C. § 252:100-39-15 (Oklahoma) and W.A.Q.S.R. 5 § 2(b) & 3(b) (Wyoming).
- 325. <u>Reservation of Rights</u>. Notwithstanding the resolution of liability in Paragraph 324, nothing in this Consent Decree precludes the United States and/or the Plaintiff-Intervenors from seeking from the Sinclair Refineries injunctive and/or other equitable relief or civil

penalties for violations by the Sinclair Refineries of Benzene Waste NESHAP and/or LDAR requirements that (A) commenced prior to the Date of Entry of this Consent Decree and continued after the Date of Entry if the Sinclair Refineries fail to identify and address such violations as required by Paragraphs 154, 158 and 98-105; or (B) commenced after the Date of Entry of the Consent Decree.

## 326. Reserved.

- 327. <u>Liability under EPCRA/CERCLA for Pre-Lodging Acid Gas Flaring Incidents or Hydrocarbon Gas Flaring Incidents</u>. Entry of this Consent Decree shall resolve all civil liability of the Sinclair Refineries to the United States and the Plaintiff-Intervenors for violations of EPCRA or Section 103(a) of CERCLA, 42 U.S.C. § 9603(a), for incidents identified in the flaring history required by Paragraph 77.
- 328. <u>Audit Policy</u>. Nothing in this Consent Decree is intended to limit or disqualify the Sinclair Refineries, on the grounds that information was not discovered and supplied voluntarily, from seeking to apply EPA's Audit Policy or any state audit policy to any violations or non-compliance that the Sinclair Refineries discover during the course of any investigation, audit, or enhanced monitoring that the Sinclair Refineries are required to undertake pursuant to this Consent Decree.
- 329. <u>Claim/Issue Preclusion</u>. In any subsequent administrative or judicial proceeding initiated by the United States or the Co-Plaintiff for injunctive relief, penalties, or other appropriate relief relating to the Sinclair Refineries for violations of the PSD/NSR, NSPS, NESHAP, and/or LDAR requirements, not identified in Paragraph 80 of the Consent Decree and/or the Complaint:
- a. The Sinclair Refineries shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, *res judicata*, collateral estoppel, issue preclusion, or claim-splitting. Nor may the Sinclair Refineries assert, or maintain, any other defenses based upon any contention that the claims raised by the United States or the Plaintiff-Intervenors in the subsequent proceeding were or should have been brought in the instant case. Nothing in the

preceding sentences is intended to affect the ability of the Sinclair Refineries to assert that the claims are deemed resolved by virtue of this Part of the Consent Decree.

- b. Except as set forth in Paragraph 329.a., above, the United States and the Plaintiff-Intervenors may not assert or maintain that this Consent Decree constitutes a waiver or determination of, or otherwise obviates, any claim or defense whatsoever, or that this Consent Decree constitutes acceptance by the Sinclair Refineries of any interpretation or guidance issued by EPA related to the matters addressed in this Consent Decree.
- 330. <u>Imminent and Substantial Endangerment</u>. Nothing in this Consent Decree shall be construed to limit the authority of the United States and the Plaintiff-Intervenors to undertake any action against any person to abate or correct conditions which may present an imminent and substantial endangerment to the public health, welfare, or the environment.

## XVII. GENERAL PROVISIONS

331. Other Laws. Except as specifically provided by this Consent Decree, nothing in this Consent Decree will relieve the Sinclair Refineries of their obligation to comply with all applicable federal, state, regional and local laws and regulations, including but not limited to more stringent standards. In addition, nothing in this Consent Decree will be construed to prohibit or prevent the United States or Co-Plaintiffs from developing, implementing, and enforcing more stringent standards subsequent to the Date of Lodging of this Consent Decree through rulemaking, the permit process, or as otherwise authorized or required under federal, state, regional, or local laws and regulations. Subject to Part XVI (Effect of Settlement), Part XI (Stipulated Penalties), and Paragraph 333 (Permit Violations) of this Consent Decree, nothing contained in this Consent Decree will be construed to prevent or limit the rights of the United States or the Co-Plaintiffs to seek or obtain other remedies or sanctions available under other federal, state, regional or local statutes or regulations, by virtue of the Sinclair Refineries' violation of the Consent Decree or of the statutes and regulations upon which the Consent Decree is based, or for the Sinclair Refineries' violations of any applicable provision of law. This will include the right of the United States or the Co-Plaintiffs to invoke the authority of the Court to order the Sinclair Refineries' compliance with this Consent Decree in a subsequent contempt action. The requirements of this Consent Decree do not exempt the Sinclair Refineries

from complying with any and all new or modified federal, state, regional and/or local statutory or regulatory requirements that may require technology, equipment, monitoring, or other upgrades after the Date of Lodging of this Consent Decree.

- 332. <u>Startup, Shutdown, Malfunction</u>. Notwithstanding the provisions of this Consent Decree regarding startup, shutdown, and Malfunction, this Consent Decree does not exempt the Sinclair Refineries from the requirements of state laws and regulations or from the requirements of any permits or plan approvals issued to the Sinclair Refineries, as these laws, regulations, permits, and/or plan approvals may apply to startups, shutdowns, and Malfunctions.
- 333. <u>Permit Violations</u>. Nothing in this Consent Decree will be construed to prevent or limit the right of the United States or the Co-Plaintiffs to seek injunctive or monetary relief for violations of permits; provided, however, that with respect to monetary relief, the United States and the Co-Plaintiffs must elect between filing a new action for such monetary relief or seeking stipulated penalties under this Consent Decree, if stipulated penalties also are available for the alleged violation(s).
- 334. <u>Failure of Compliance</u>. The United States and the Co-Plaintiffs do not, by their consent to the entry of Consent Decree, warrant or aver in any manner that the Sinclair Refineries' complete compliance with the Consent Decree will result in compliance with the provisions of the CAA or the corollary state and local statutes. Notwithstanding the review or approval by EPA or the Co-Plaintiffs of any plans, reports, policies or procedures formulated pursuant to the Consent Decree, each Sinclair Refinery will remain solely responsible for compliance with the terms of the Consent Decree, all applicable permits, and all applicable federal, state, regional, and local laws and regulations, except as provided in Part XIV (Force Majeure).
- 335. Alternative Monitoring Plans. Except as otherwise specifically provided in Paragraph 54, wherever this Consent Decree requires or permits the Sinclair Refineries to submit an AMP to EPA for approval, the Sinclair Refineries will submit a complete AMP application. If an AMP is not approved, then within ninety (90) days of the Sinclair Refineries' receipt of disapproval, the Sinclair Refineries will submit to EPA for approval, with a copy to the Applicable Co-Plaintiff, a plan and schedule that provide for compliance with the applicable

monitoring requirements as soon as practicable. Such plan may include a revised AMP application, physical or operational changes to the equipment, or additional or different monitoring.

- 336. <u>Service of Process</u>. The Sinclair Refineries hereby agree to accept service of process by mail with respect to all matters arising under or relating to the Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including but not limited to, service of a summons. The persons identified by the Sinclair Refinery at Paragraph 341 are authorized to accept service of process with respect to all matters arising under or relating to the Consent Decree.
- 337. Post-Lodging/Pre-Entry Obligations. Obligations of the Sinclair Refineries under this Consent Decree to perform duties scheduled to occur after the Date of Lodging of the Consent Decree, but prior to the Date of Entry of the Consent Decree, will be legally enforceable only on and after the Date of Entry of the Consent Decree. Liability for stipulated penalties, if applicable, will accrue for violation of such obligations and payment of such stipulated penalties may be demanded by the United States or the Co-Plaintiffs as provided in this Consent Decree, provided that the stipulated penalties that may have accrued between the Date of Lodging of the Consent Decree and the Date of Entry of the Consent Decree may not be collected unless and until this Consent Decree is entered by the Court.
  - 338. Costs. Each Party to this action will bear its own costs and attorneys' fees.
- 339. <u>Public Documents</u>. All information and documents submitted by the Sinclair Refineries to EPA and the Co-Plaintiffs pursuant to this Consent Decree will be subject to public inspection in accordance with the respective statutes and regulations that are applicable to EPA and the Co-Plaintiffs, unless subject to legal privileges or protection or identified and supported as trade secrets or business confidential in accordance with the respective state or federal statutes or regulations.
- 340. <u>Public Notice and Comment</u>. The Parties agree to the Consent Decree and agree that the Consent Decree may be entered upon compliance with the public notice procedures set forth at 28 C.F.R. § 50.7, and upon notice to this Court from the United States Department of

Justice requesting entry of the Consent Decree. The United States and Co-Plaintiffs reserve the right to withdraw or withhold its consent to the Consent Decree if public comments disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate.

341. Notice. Unless otherwise provided herein, notifications to or communications between the Parties will be deemed submitted on the date they are postmarked and sent by U.S. Mail, postage pre-paid, except for notices under Part XIV and Part XV which will be sent either by overnight mail or by certified or registered mail, return receipt requested. Each report, study, notification or other communication of the Sinclair Refineries will be submitted as specified in this Consent Decree, with copies to EPA Headquarters, the applicable EPA Region, and the Applicable Co-Plaintiff. If the date for submission of a report, study, notification or other communication falls on a Saturday, Sunday or legal holiday, the report, study, notification or other communication will be deemed timely if it is submitted the next business day. Except as otherwise provided herein, all reports, notifications, certifications, or other communications required or allowed under this Consent Decree to be submitted or delivered to the United States, EPA, the Co-Plaintiffs, and the Sinclair Refineries will be addressed as follows:

## As to the United States:

Chief
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, DC 20044-7611
Reference Case No. 90-5-2-1-07793

## As to EPA:

Director, Air Enforcement Division Office of Civil Enforcement U.S. Environmental Protection Agency Mail Code 2242-A 1200 Pennsylvania Avenue, N.W. Washington, DC 20460-0001

## with a hard copy to:

Director, Air Enforcement Division Office of Civil Enforcement c/o Matrix New World Engineering, Inc. 120 Eagle Rock Ave., Suite 207 East Hannover, NJ 07936-3159

and an electronic copy to csullivan@matrixnewworld.com foley.patrick@epa.gov

## **EPA Regions:**

## Region 6:

Chief Air, Toxics, and Inspections Coordination Branch Environmental Protection Agency, Region 6 1445 Ross Avenue Dallas, Texas 75202-2733

## Region 8:

Air Program Director
c/o Scott Whitmore (8ENF-AT)
Office of Enforcement, Compliance & Environmental Justice
Environmental Protection Agency, Region 8
1595 Wynkoop Street

## As to Co-Plaintiffs:

## State of Oklahoma

Eddie Terrill, Director Air Quality Division P.O. Box 1677 Oklahoma City, OK 73101-1677

## State of Wyoming

Administrator, Air Quality Division, Wyoming Department of Environmental Quality Herschler Building 122 West 25th Street Cheyenne, WY 82002

## As to the Sinclair Refineries:

## Sinclair Tulsa Refining Company

Mr. Mike Bellinger Refinery Manager P.O. Box 970 Tulsa, OK 74101

## Sinclair Wyoming Refining Company

Mr. Paul Fritz Refinery Manager P.O. Box 277 East Lincoln Highway Sinclair, WY 82334

## Sinclair Casper Refining Company

Mr. Tom Crull Refinery Manager P.O. Box 510 Evansville, WY 82636

With hard copies of all notices as to all Sinclair Refineries sent to

Lynn Hart, Esq.
General Counsel
Sinclair Oil Corporation
550 East South Temple
Salt Lake City, UT 84102-1005
United States of America

and

Kevin Brown
Executive Vice President, Operations
Sinclair Oil Corporation
550 East South Temple
Salt Lake City, UT 84102-1005
United States of America

Any party may change either the notice recipient or the address for providing notices to it by serving all other parties with a notice setting forth such new notice recipient or address. In addition, the nature and frequency of reports required by the Consent Decree may be modified by mutual consent of the Parties. The consent of the United States to such modification must be in the form of a written notification from EPA, but need not be filed with the Court to be effective.

- 342. <u>Approvals</u>. All EPA approvals will be made in writing. All Co-Plaintiff approvals will be sent from the offices identified in Paragraph 341.
- 343. Opportunity for Comment by Applicable Co-Plaintiff. For all provisions of Part V where EPA approval is required, the Applicable Co-Plaintiff is entitled to provide comments to EPA and to consult with EPA regarding the issue in question.
- 344. <u>Paperwork Reduction Act</u>. The information required to be maintained or submitted pursuant to this Consent Decree is not subject to the Paperwork Reduction Act of 1980, 44 U.S.C. §§ 3501 et seq.
- 345. Modification. This Consent Decree contains the entire agreement of the Parties and will not be modified by any prior oral or written agreement, representation or understanding. Prior drafts of the Consent Decree will not be used in any action involving the interpretation or enforcement of the Consent Decree. Non-material modifications to this Consent Decree will be effective when signed in writing by EPA and the Sinclair Refineries. The United States will file non-material modifications with the Court on a periodic basis. For purposes of this Paragraph, non-material modifications include but are not limited to modifications to the frequency of reporting obligations and modifications to schedules that do not extend the date for compliance with emissions limitations following the installation of control equipment or the completion of a catalyst additive program, provided that such changes are agreed upon in writing between EPA and the Sinclair Refineries. Material modifications to this Consent Decree will be in writing, signed by EPA, the Applicable Co-Plaintiff, and the Sinclair Refineries, and will be effective upon approval by the Court.
- 346. <u>Effect of Shutdown</u>. Except as provided in Section V.F., the permanent shutdown of a unit and the surrender of all permits for that unit will be deemed to satisfy all requirements of this Consent Decree applicable to that unit on and after the later of: (i) the date of the shutdown of the unit; or (ii) the date of the surrender of all permits. The permanent shutdown of

a Refinery and the surrender of all air permits for that Refinery will be deemed to satisfy all requirements of this Consent Decree applicable to that Refinery on and after the later of: (i) the date of the shutdown of the Refinery; or (ii) the date of the surrender of all permits.

## **XVIII. TERMINATION**

- 347. <u>Certification of Completion: Applicable Sections</u>. Prior to moving for termination under Paragraph 352, a Sinclair Refinery may seek to certify completion of one or more of the following Sections/Parts of the Consent Decree applicable to that Refinery:
  - (a) Section V.A. Fluid Catalytic Cracking Units (including operation of the unit for one year after completion in compliance with the emission limits established pursuant to the Consent Decree);
  - (b) Sections V.B. through V.E. Fluid Catalytic Cracking Units (including operation of the unit for one year after completion in compliance with the emission limits established pursuant to this Consent Decree);
  - (c) Sections V.F. and V.G. Combustion Units (including operation of the relevant units for one year after completion in compliance with the emission limit set pursuant to the Consent Decree);
  - (d) Sections V.H. V.K. SRPs and Flares;
  - (e) Sections V.M. and V.N. (Benzene and LDAR); and
  - (f) Part VIII Supplemental Environmental Projects.
- 348. <u>Certification of Completion: the Sinclair Refinery Actions</u>. If a Sinclair Refinery concludes that any of the Sections of the Consent Decree identified in Paragraph 347 have been completed, the Sinclair Refinery may submit a written report to EPA and the Applicable Co-Plaintiff describing the activities undertaken and certifying that the applicable Section(s) have been completed in full satisfaction of the requirements of this Consent Decree, and that the Sinclair Refinery is in substantial and material compliance with all of the other requirements of the Consent Decree. The report will contain the following statement, signed by a responsible corporate official of the Sinclair Refinery:

To the best of my knowledge, after appropriate investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

- 349. Certification of Completion: EPA Actions. Upon receipt of the Sinclair Refinery's certification and after opportunity for comment by the Applicable Co-Plaintiff, EPA will notify the Sinclair Refinery whether the requirements set forth in the applicable Section have been completed in accordance with this Consent Decree:
  - (a) If EPA concludes that the requirements have not been fully complied with, EPA will notify the Sinclair Refinery as to the activities that must be undertaken to complete the applicable Section of the Consent Decree. The Sinclair Refinery will perform all activities described in the notice, subject to its right to invoke the dispute resolution procedures set forth in Part XV (Dispute Resolution); and/or
  - (b) If EPA concludes that the requirements of the applicable Section or Part have been completed in accordance with this Consent Decree, EPA will so certify in writing to the Sinclair Refinery. This certification will constitute the certification of completion of the applicable Section or Part for purposes of this Consent Decree.

The parties recognize that ongoing obligations under such Sections remain and necessarily continue (e.g., reporting, recordkeeping, training, auditing requirements), and that the Sinclair Refinery's certification is that it is in current compliance with all such obligations.

- 350. <u>Certification of Completion</u>: No Impediment to Stipulated Penalty Demand. Nothing in Paragraphs 348 and 349 will preclude the United States or the Co-Plaintiffs from seeking stipulated penalties for a violation of any of the requirements of the Consent Decree regardless of whether a Certification of Completion has been issued under Paragraph 349(b) of the Consent Decree. In addition, nothing in this Paragraph 350 will permit a Sinclair Refinery to fail to implement any ongoing obligations under the Consent decree regardless of whether a Certification of Completion has been issued.
- 351. <u>Termination: Conditions Precedent</u>. This Consent Decree will be subject to termination upon motion by the Parties or upon motion by the Sinclair Refinery acting alone under the conditions identified in this Paragraph. Prior to seeking termination, a Sinclair

Refinery must have completed and satisfied all of the following requirements of this Consent Decree:

- (a) Installation of control technology systems as specified in this Consent Decree;
- (b) Compliance with all provisions contained in this Consent Decree, such compliance may be established for specific parts of the Consent Decree in accordance with Paragraphs 347-349;
- (c) Payment of all penalties and other monetary obligations due under the terms of the Consent Decree; unless all penalties and/or other monetary obligations owed to the United States or the Co-Plaintiffs are fully paid as of the time of the Motion;
- (d) Completion of the Supplemental/Beneficial Environmental Projects under Part VIII;
- (e) Application for and receipt of permits incorporating the emission limits and standards established under this Consent Decree; and
- (f) Operation for at least one year of each unit in compliance with the emission limits established herein and certification of such compliance for each unit within the first progress report following the conclusion of the compliance period.
- 352. <u>Termination: Procedure</u>. At such time as a Sinclair Refinery believes that it has satisfied the requirements for termination set forth in Paragraph 351, the Sinclair Refinery will certify such compliance and completion to the United States and the Co-Plaintiffs in accordance with the certification language of Paragraph 348. Unless either the United States or any Co-Plaintiff objects in writing with specific reasons within one-hundred twenty (120) days of receipt of the Sinclair Refinery's certification under this Paragraph, the Court may upon motion by the Sinclair Refinery order that this Consent Decree be terminated. If either the United States or any Co-Plaintiff objects to the certification by the Sinclair Refinery, then the matter will be submitted to the Court for resolution under Part XV (Retention of Jurisdiction/Dispute Resolution). In such case, the Sinclair Refinery will bear the burden of proving that this Consent Decree should be terminated.

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## XIX. SIGNATORIES

353. Each of the undersigned representatives certify that they are fully authorized to
enter into the Consent Decree on behalf of such Parties, and to execute and to bind such Parties
to the Consent Decree.
Dated this day of, 2008.
UNITED STATES DISTRICT JUDGE

FOR PLAINTIFF THE UNITED STATES OF AMERICA:

Date: 250 DEC. 2007

RONALD J. TENPAS

Assistant Attorney General
Environment and Natural Resources Division
United States Department of Justice

Date: 1/9/0%

JAMES D. FREEMAN
Environmental Enforcement Section
United States Department of Justice

FOR PLAINTIFF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

Date: Novembre 26, 2007

Assistant Administrator for Enforcement and
Compliance Assurance
United States Environmental Protection Agency

FOR PLAINTIFF-INTERVENOR, STATE OF WYOMING

Date: 12/6/07

JOHN CORKA

Director

Wyoming Department of Environmental Quality

Date: 12/3/07

DAVE HINLEY

Administrator, Air Quality Division Wyoming Department of Environmental Quality

FOR PLAINTIFF-INTERVENOR, OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

Dated Dec . 12, 2007

STEVEN A. THOMPSON
Executive Director
Oklahoma Department of Environmental Quality

FOR DEFENDANT SINCLAIR TULSA REFINING COMPANY

Date: 11/19/07

Veter M. Johnson President, Sinclair Tulsa Refining Company

FOR DEFENDANT SINCLAIR WYOMING REFINING COMPANY

Date: 11/19/07

Peter M. Johnson

President, Sinclair Wyoming Refining Company

FOR DEFENDANT SINCLAIR CASPER REFINING COMPANY

Date: 11/14/07

Peter M. Johnson

President, Sinclair Casper Refining Company

## Appendix A: List of Flaring Devices

Tulsa Refinery

Flare 1

Flare 2

Sinclair Refinery

Vertical Flare

Tulip Field Flare

Horizontal Ground Flare

Casper Refinery

Vertical Flare

Note: The loading rack thermal oxidizers at the Tulsa, Sinclair and Casper Refineries and the tank farm thermal oxidizer at the Casper Refinery are thermal oxidizers per 40 CFR 63 subpart CC and are not Flaring Devices.

Appendix B: List of Combustion Units (Heaters and Boilers)

	TPY
	Baseline
Tulsa	983.4
Sinclair	586.8
Casper	176.2
Total	1746.4

## Sinclair Wyoming Refinery

pt#	COMBUSTION UNIT NAME	Allowable Heat Input Capacity	Maximum Physical Heat Input Capacity	2004 Utilization Rate	NOx Baseline Emissions Factor	2004 NOx Baseline Emissions Rate	2005 Utilization Rate	NOx Baseline Emissions Factor	2005 NOx Baseline Emissions Rate	2004 - 2005 average NOx emissions	Type of data used to derive emissions estimate
		MM Btu/hr (HHV)	MM Btu/hr (HHV)	MM Btu/hr (HHV)	lb NOx / MM Btu (HHV)	TPY	MM Btu/hr (HHV)	lb NOx / MM Btu (HHV)	TPY	TPY	
1	FCC Heater B2	66.0	72.7	57.6	0.098	24.7	55.65	0.098	23.9	24.3	AP-42, utilization rates from 1999 & 2000
10	Naphtha Split Htr	34.5	46.3	23.3	0.186	19.0	22.26	0.141	13.7	16.4	9/3/03 and 10/19/04 tests
13	1 Ref Htr	44.6	50.8	25.6	0.201	22.5	18.39	0.017	1.4	12.0	9/3/03 and 2/15/05 tests
14	2 Ref Htr	74.8	92.4	37.4	0.188	30.8	24.81	0.025	2.7	16.7	6/18/04 and 7/8/05 tests
15	3 Ref Htr	22.4	22.4	12.1	0.155	8.2	9.24	0.028	1.1	4.6	3/13/04 and 2/15/05 tests
16	Stabilizer Reboiler	11.1	11.1	9.6	0.098	4.1	7.65	0.022	0.7	2.4	AP-42 and 2/15/05 test
18	Crude Htr 1	66.6	60.0	45.3	0.230	45.7	43.11	0.230	43.4	44.5	Permit 30- 145

pt#	COMBUSTION UNIT NAME	Allowable Heat Input Capacity	Maximum Physical Heat Input Capacity	2004 Utilization Rate	NOx Baseline Emissions Factor	2004 NOx Baseline Emissions Rate	2005 Utilization Rate	NOx Baseline Emissions Factor	2005 NOx Baseline Emissions Rate	2004 - 2005 average NOx emissions	Type of data used to derive emissions estimate
		MM Btu/hr (HHV)	MM Btu/hr (HHV)	MM Btu/hr (HHV)	Ib NOx / MM Btu (HHV)	TPY	MM Btu/hr (HHV)	lb NOx / MM Btu (HHV)	TPY	TPY	
19	Crude Htr 2	66.6	60.0	55.4	0.230	55.8	48.33	0.230	48.7	52.2	Permit 30- 145
20	583 Vacuum Htr	42.0	61.6	42.9	0.159	29.8	43.02	0.112	21.0	25.4	3/13/03 and 10/20/04 tests
23	Crude Htr F102a	43.0	60.3	40.8	0.172	30.7	38.13	0.119	19.9	25.3	(average of 3/11/03 and 3/12/03) and 10/19/04 tests
25	582 Vacuum Htr F104	45.0	61.6	31.0	0.121	16.4	26.00	0.128	14.6	15.5	9/2/03 and 10/19/04 tests
33	Alky Htr B16	56.0	79.2	35.7	0.115	18.0	41.72	0.106	19.4	18.7	9/4/03 and (average of 10/20/04 and 4/27/05) tests
35	#10 High P Boiler	100.0	189.0	65.3	0.217	62.1	60.38	0.213	56.3	59.2	(average of AP-42, 6/17/04, 12/14/04) and (average of 4/27/05, AP- 42,10/12/05) tests
40	#8 High P Boiler (fuel gas)	100.0	162.0	46.3	0.201	40.8	32.68	0.204	29.1	35.0	2/27/01 test
	#8 High P Boiler (fuel oil)			22.6	0.201	19.9	26.96	0.204	24.0	22.0	2/27/01 test

pt#	COMBUSTION UNIT NAME	Allowable Heat Input Capacity	Maximum Physical Heat Input Capacity	2004 Utilization Rate	NOx Baseline Emissions Factor	2004 NOx Baseline Emissions Rate	2005 Utilization Rate	NOx Baseline Emissions Factor	2005 NOx Baseline Emissions Rate	2004 - 2005 average NOx emissions	Type of data used to derive emissions estimate
		MM Btu/hr (HHV)	MM Btu/hr (HHV)	MM Btu/hr (HHV)	lb NOx / MM Btu (HHV)	TPY	MM Btu/hr (HHV)	lb NOx / MM Btu (HHV)	TPY	TPY	
41	#9 High P Boiler (fuel gas)	100.0	162.0	36.8	0.212	34.3	37.12	0.203	33.1	33.7	2/28/01 test
	#9 High P Boiler (fuel oil)			30.8	0.212	28.7	24.44	0.203	21.8	25.2	2/28/01 test
42	#4, #5, #6, #7 Low P Boilers (fuel gas)	88.0	176.0	57.4	0.172	43.3	50.18	0.089	19.5	31.4	10/23/03 and 6/17/04 tests
	#4, #5, #6, #7 Low P Boilers (fuel oil)			9.2	0.367	14.8	8.80	0.367	14.2	14.5	AP-42 .
51	HCU Htr H3	56.0	56.0	28.4	0.064	8.0	27.67	0.053	6.5	7.2	5/21/02 and 2/15/05 tests
52	HCU Htr H4	57.0	57.0	29.5	0.053	6.8	30.86	0.053	7.2	7.0	Average of 5/2/01 tests
53	H2 plant	288.0	288.0	189.0	0.065	53.6	184.16	0.065	52.3	52.9	Average of 1/16/01 tests
26	#2 HDS Heater	28.0	33.0	24.2	0.098	10.4	22.56	0.098	9.7	10.0	AP-42
27	#3 HDS Heater	18.0	18.0	9.8	0.098	4.2	10.70	0.098	4.6	4.4	AP-42
32	Alky Htr B15	18.0	18.0	11.8	0.098	5.1	10.61	0.098	4.6	4.8	AP-42
34	Alky Htr H1	18.8	18.8	16.0	0.098	6.9	13.28	0.098	5.7	6.3	AP-42
11	#1 HDS Heater	24.0	24.0	19.4	0.098	8.3	14.48	0.098	6.2	7.3	AP-42
12	LEF Heater	24.0	24.0	19.6	0.098	8.4	17.07	0.098	7.3	7.9	AP-42
	Total - heaters & boilers	1492.4	1904.2	1032.6		661.1	950.3		512.4	586.8	

# Sinclair Tulsa Refinery

pt#	COMBUSTION UNIT NAME	Allowable Heat Input Capacity	Maximum Physical Heat Input Capacity	2004 Utilization Rate	NOx Baseline Emissions Factor	2004 NOx Baseline Emissions Rate	2005 Utilization Rate	NOx Baseline Emissions Factor	2005 NOx Baseline Emissions Rate	2004 - 2005 average NOx emissions	Type of data used to derive emission estimate
		MM Btu/hr	MM Btu/hr	MM Btu/hr (HHV)	lb NOx / MM Btu (HHV)	TPY	MM Btu/hr (HHV)	lb NOx / MM Btu (HHV)	TPY	TPY	
1	Boiler 1 (east)	233.0	233.0	136.1	0.297	177.3	124.2	0.297	161.8	169.6	average of 11/10/03 and 12/15/03 tests
	Boiler 2 (east)	233.0	233.0	136.1	0.290	172.8	124.2	0.290	157.7	165.3	average of 11/10/03 and 12/15/03 tests
	Boiler 3 (west) fuel gas	233.0	233.0	94.2	0.199	82.0	73.5	0.199	64.0	73.0	average of 11/10/03 and 12/15/03 tests
2	Boiler 3 (west) fuel oil			41.9	0.313	57.5	50.7	0.313	69.6	63.6	AP-42
	Boiler 4 (west) fuel gas	233.0	233.0	94.2	0.289	119.1	73.5	0.289	93.0	106.1	average of 11/10/03 and 12/15/03 tests
	Boiler 4 (west) fuel oil			41.9	0.313	57.5	50.7	0.313	69.6	63.6	AP-42
6	Crude Unit Atm. Heater	200.0	200.0	179.7	0.089	70.4	163.8	0.089	64.2	67.3	average of 11/12/03 and 12/17/03 tests
	Crude Unit Vacuum Heater	90.0	90.0	88.5	0.135	52.1	80.7	0.135	47.5	49.8	average of 11/12/03 and 12/17/03 tests
7	HTU North - Reactor Charge Heater	55.0	55.0	66.6	0.113	33.0	62.2	0.113	30.8	31.9	average of 11/11/03 and 12/16/03 tests

pt#	COMBUSTION UNIT NAME	Allowable Heat Input Capacity	Maximum Physical Heat Input Capacity	2004 Utilization Rate	NOx Baseline Emissions Factor	2004 NOx Baseline Emissions Rate	2005 Utilization Rate	NOx Baseline Emissions Factor	2005 NOx Baseline Emissions Rate	2004 - 2005 average NOx emissions	Type of data used to derive emission estimate
		MM Btu/hr	MM Btu/hr	MM Btu/hr (HHV)	Ib NOx / MM Btu (HHV)	TPY	MM Btu/hr (HHV)	lb NOx / MM Btu (HHV)	TPY	TPY	
8	HTU South - Stripper Reboiler	120.0	120.0	64.9	0.135	38.4	60.6	0.135	35.8	37.1	average of 11/11/03 and 12/16/03 tests
·	HTU South - Fractionator Reboiler	65.0	65.0	39.3	0.113	19.4	36.7	0.113	18.2	18.8	average of 11/11/03 and 12/16/03 tests
9	FCCU Charge Heater	150.0	150.0	50.0	0.189	41.3	56.1	0.189	46.4	43.9	11/12/03 test
13	CRU Stabilizer Reboiler	85.0	85.0	36.9	0.117	18.9	31.0	0.117	15.9	17.4	average of 11/11/03 and 12/16/03 tests
	CRU Charge Heater	120.0	120.0	47.2	0.077	15.9	39.7	0.077	13.4	14.7	average of 11/11/03 and 12/16/03 tests
14	CRU Intermediate #1	101.0	101.0	88.2	0.110	42.6	74.2	0.110	35.8	39.2	average of 11/11/03 and 12/16/03 tests
	CRU Intermediate #2	25.0	25.0	32.8	0.133	19.1	27.6	0.133	16.0	17.5	average of 11/11/03 and 12/16/03 tests
19	Isom Charge	65.0	65.0	11.5	0.098	4.9	10.3	0.098	4.4	4.7	AP-42, utilization rates from 2000 & 2001
	Total - heaters & boilers	2008.0	2008.0	1249.9		1022.4	1139.8		944.4	983.4	

# Sinclair Casper Refinery

pt#	COMBUSTION UNIT NAME	Allowable Heat Input Capacity	Maximum Physical Heat Input Capacity	2004 Utilization Rate	NOx Baseline Emissions Factor	2004 NOx Baseline Emissions Rate	2005 Utilization Rate	NOx Baseline Emissions Factor	2005 NOx Baseline Emissions Rate	2004 - 2005 average NOx emissions	Type of data used to derive emission estimate
		MM Btu/hr	MM Btu/hr	MM Btu/hr (HHV)	Ib NOx / MM Btu (HHV)	TPY	MM Btu/hr (HHV)	lb NOx / MM Btu (HHV)	TPY	TPY	
2	# 5 Boiler (fuel gas)	53.6	53.6	9.1	0.139	5.5	14.30	0.169	10.56	8.0	10/4/04 and 10/7/05 tests
	#5 Boiler (fuel oil)			12.0	0.367	19.2	8.22	0.367	13.20	16.2	AP-42
4	#7 Boiler	59.0	59.0	29.7	0.138	18.0	27.71	0.138	16.77	17.4	Average of 10/3/03 and 9/27/02 tests
9	B-1 # 4 Crude Heater (fuel gas)	62.5	62.5	27.1	0.412	48.9	25.12	0.209	23.05	36.0	10/2/03 and 10/5/04 tests
	B-1 # 4 Crude Heater (fuel oil)			5.4	0.412	9.7	10.03	0.600	26.35	18.0	10/2/03 test and AP-42
11	# 5 Crude Heater (fuel gas)	54.2	54.2	27.1	0.339	40.3	29.70	0.227	29.48	34.9	9/30/03 test, AP- 42
	# 5 Crude Heater (fuel oil)			5.36	0.339	7.96	0.00	0.227	0.00	4.0	9/30/03 test, AP- 42
15	B-20-2 Reformer # 2 Heater	53.5	53.5	18.1	0.176	13.9	17.53	0.176	13.48	13.7	Average of 10/1/03 tests

pt#	COMBUSTION UNIT NAME	Allowable Heat Input Capacity	Maximum Physical Heat Input Capacity	2004 Utilization Rate	NOx Baseline Emissions Factor	2004 NOx Baseline Emissions Rate	2005 Utilization Rate	NOx Baseline Emissions Factor	2005 NOx Baseline Emissions Rate	2004 - 2005 average NOx emissions	Type of data used to derive emission estimate
		MM Btu/hr	MM Btu/hr	MM Btu/hr (HHV)	lb NOx / MM Btu (HHV)	TPY	MM Btu/hr (HHV)	lb NOx / MM Btu (HHV)	TPY	TPY	
20	F-202 Feed Heater (FCC)	45.8	45.8	25.3	0.200	22.2	20.13	0.200	17.64	19.9	Permit 30- 151-1
18	B-201 CHD Heater	17.4	17.4	18.5	0.098	7.9	19.29	0.098	8.28	8.1	AP-42
	Total - heaters & boilers	346.0	346.0	177.6		193.6	172.0		158.8	176.2	

## Appendix C: Heater and Boiler NOx Control Plan

REFINERY	pt#	COMBUSTION UNIT NAME	Type of Qualifying Control / Allowable NOx Emission Rate	Installation of Qualifying Control or Shutdown Date	Allowable Heat Release - After Control	Baseline Emissions	Emissions after control	Emissions Controlled	Cumulative NOx Controlled
					MM Btu/hr (HHV)	TPY	TPY	TPY	TPY
Tulsa	2	Boiler 3 (west) fuel oil	eliminate fuel oil	DOL	0.0	63.6	0.0	63.6	63.6
Tulsa	2	Boiler 4 (west) fuel oil	eliminate fuel oil	DOL	0.0	63.6	0.0	63.6	127.2
Tulsa	8	HTU South - Stripper Reboiler	remove from service	2006	0.0	37.1	0.0	37.1	164.3
Tulsa	8	HTU South - Fractionator Reboiler	remove from service	2006	0.0	18.8	0.0	18.8	183.1
Tulsa	19	Isom Charge	remove from service	2002	0.0	4.7	0.0	4.7	187.8
Sinclair	33	Alky Htr B16	remove from service	2006	0.0	18.7	0.0	18.7	206.4
Sinclair	13	1 Ref Htr	0.040 lb/MM Btu (HHV)	2004	44.6	12.0	7.8	4.1	210.6
Sinclair	14	2 Ref Htr	0.040 lb/MM Btu (HHV)	2004	74.8	16.7	13.1	3.6	214.2
Sinclair	15	3 Ref Htr	0.040 lb/MM Btu (HHV)	2004	22.4	4.6	3.9	0.7	214.9
Sinclair	16	Stabilizer Reboiler	0.040 lb/MM Btu (HHV)	2004	11.1	2.4	1.9	0.5	215.4

REFINERY	pt#	COMBUSTION UNIT NAME	Type of Qualifying Control / Allowable NOx Emission Rate	Installation of Qualifying Control or Shutdown Date	Allowable Heat Release - After Control	Baseline Emissions	Emissions after control	Emissions Controlled	Cumulative NOx Controlled
					MM Btu/hr (HHV)	TPY	TPY	TPY	TPY
Tulsa	13	CRU Stabilizer Reboiler	0.040 Ib/MM Btu (HHV)	2007	85.0	17.4	14.9	2.5	217.9
Sinclair	20	583 Vacuum Htr	remove from service	2008	0.0	25.4	0.0	25.4	243.3
Sinclair	18	Crude Htr 1	remove from service	2006	0.0	44.5	0.0	44.5	287.9
Sinclair	19	Crude Htr 2	remove from service	2006	0.0	52.2	0.0	52.2	340.1
Casper	11	# 5 Crude Heater (fuel gas)	remove from service	2008	0.0	34.9	0.0	34.9	375.0
Casper	11	# 5 Crude Heater (fuel oil)	eliminate fuel oil	DOL	0.0	4.0	0.0	4.0	379.0
Tulsa	1	Boiler 1 (east)	0.040 lb/MM Btu (HHV)	2009	233.0	169.6	40.8	128.7	507.7
Tulsa	1	Boiler 2 (east)	0.040 lb/MM Btu (HHV)	2008	233.0	165.3	40.8	124.4	632.1
Tulsa	2	Boiler 4 (west) fuel gas	0.040 lb/MM Btu (HHV)	2008	233.0	106.1	40.8	65.2	697.4
Tulsa	2	Boiler 3 (west) fuel gas	0.040 lb/MM Btu (HHV)	2008	233.0	73.0	40.8	32.2	729.6

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REFINERY	pt#	COMBUSTION UNIT NAME	Type of Qualifying Control / Allowable NOx Emission Rate	Installation of Qualifying Control or Shutdown Date	Allowable Heat Release - After Control	Baseline Emissions	Emissions after control	Emissions Controlled	Cumulative NOx Controlled
	·				MM Btu/hr (HHV)	TPY	TPY	TPY	TPY
Sinclair	1	FCC Heater B2	remove from service	DOL	0.0	24.3	0.0	24.3	753.9
Casper	20	F-202 Feed Heater (FCC)	0.040 lb/MM Btu (HHV)	2008	45.8	19.9	8.0	11.9	765.8
Casper	18	B-201 CHD Heater	0.040 lb/MM Btu (HHV)	2006	17.4	8.1	2.7	5.4	771.2
Sinclair	10	Naphtha Split Htr	0.040 lb/MM Btu (HHV)	2007	34.5	16.4	5.3	11.1	782.3
Sinclair	26	#2 HDS Heater	0.040 lb/MM Btu (HHV)	2007	28	10.0	4.3	5.7	788.0
Sinclair	27	#3 HDS Heater	0.040 lb/MM Btu (HHV)	2006	18	4.4	2.8	1.6	789.7
Sinclair	32	Alky Htr B15	remove from service	2008	0.0	4.8	0.0	4.8	794.5
Sinclair	34	Alky Htr H1	remove from service	2008	0.0	6.3	0.0	6.3	800.8
Sinclair	11	#1 HDS Heater	0.040 lb/MM Btu (HHV)	2007	24	7.3	3.7	3.6	804.4

REFINERY	pt#	COMBUSTION UNIT NAME	Type of Qualifying Control / Allowable NOx Emission Rate	Installation of Qualifying Control or Shutdown Date	Allowable Heat Release - After Control	Baseline Emissions	Emissions after control	Emissions Controlled	Cumulative NOx Controlled
					MM Btu/hr (HHV)	TPY	TPY	TPY	TPY
Sinclair	12	LEF Heater	0.040 lb/MM Btu (HHV)	2007	24	7.9	3.7	4.2	808.6
Sinclair	42	#5 Low P Boiler	remove from service	DOL	0.0	7.8	0.0	7.8	816.4
Sinclair	42	#6 Low P Boiler	remove from service	DOL	0.0	7.8	0.0	7.8	824.2
Sinclair	42	#7 Low P Boiler	remove from service	DOL	0.0	7.8	0.0	7.8	832.1
Sinclair	35	#10 High P Boiler	0.040 lb/MM Btu (HHV)	2008	150	59.2	26.3	32.9	865.0

# Appendix D: List of Fuel Gas Combustion Devices with Delayed NSPS Subpart J Applicability

Tulsa Refinery Crude Unit Atm. Heater Shut down by December 31, 2010

Tulsa Refinery Crude Unit Vacuum Heater Shut down by December 31, 2010

Note: The Sinclair Tulsa Refinery shall not be limited in its use of credits from the shut-down of the Fuel Gas Combustion Devices identified in this Appendix D for NSR netting purposes.

# Appendix E: Predictive Emissions Monitoring Systems for Heaters and Boilers with Capacities Between 150 and 100 mmBTU/hr

A Predictive Emissions Monitoring Systems ("PEMS") is a mathematical model that predicts the gas concentration of NO, in the stack based on a set of operating data. Consistent with the CEMS data frequency requirements of 40 C.F.R. Part 60, the PEMS shall calculate a pound per million BTU value at least once every 15 minutes, and all of the data produced in a calendar hour shall be averaged to produce a calendar hourly average value in pounds per million BTU.

The types of information needed for a PEMS are described below. The list of instruments and data sources shown below represent an ideal case. However at a minimum, each PEMS shall include continuous monitoring for at least items 3-5 below. COPC will identify and use existing instruments and refinery data sources to provide sufficient data for the development and implementation of the PEMS.

## Instrumentation:

- 1. Absolute Humidity reading (one instrument per refinery, if available)
- 2. Fuel Density, Composition and/or specific gravity On line readings (it may be possible if the fuel gas does not vary widely, that a grab sample and analysis may be substituted)
- 3. Fuel flow rate
- 4. Firebox temperature
- 5. Percent excess oxygen
- 6. Airflow to the firebox (if known or possibly estimated)
- 7. Process variable data steam flow rate, temperature and pressure process stream flow rate, temperature & pressure, etc.

## **Computers & Software:**

Relevant data will be collected and stored electronically, using computers and software. The hardware and software specifications will be specified in the source-specific PEMS.

## Calibration and Setup:

- 1. Data will be collected for a period of 7 to 10 days of all the data that is to be used to construct the mathematical model. The data will be collected over an operating range that represents 80% to 100% of the normal operating range of the heater/boiler;
- 2. A "Validation" analysis shall be conducted to make sure the system is collecting data properly:
- 3. Stack Testing to develop the actual emissions data for comparison to the collected parameter data; and
- 4. Development of the mathematical models and installation of the model into the computer.

## The elements of a monitoring protocol for a PEMS will include:

- 1. Applicability
  - a. Identify source name, location, and emission unit number(s);
  - b. Provide expected dates of monitor compliance demonstration testing,
- 2. Source Description
  - a. Provide a simplified block flow diagram with parameter monitoring points and emission sampling points identified (e.g., sampling ports in the stack);
  - b. Provide a discussion of process or equipment operations that are known to significantly affect emissions or monitoring procedures (e.g., batch operations, plant schedules, product changes).
- 3. Control Equipment Description
  - a. Provide a simplified block flow diagram with parameter monitoring points and emission sampling points identified (e.g., sampling ports in the stack);
  - b. List monitored operating parameters and normal operating ranges;
  - c. Provide a discussion of operating procedures that are known to significantly affect emissions (e.g., catalytic bed replacement schedules).
- 4. Monitoring System Design
  - a. Install, calibrate, operate, and maintain a continuous PEMS;
  - b. Provide a general description of the software and hardware components of the PEMS, including manufacturer, type of computer, name(s) of software product(s), monitoring technique (e.g., method of emission correlation). Manufacturer literature and other similar information shall also be submitted, as appropriate;

- c. List all elements used in the PEMS to be measured (e.g., pollutant(s), other exhaust constituents) such as 02 for correction purposes, process parameters), and/or emission control device parameters));
- d. List all measurement or sampling locations (e.g., vent or stack location, process parameter measurement location, fuel sampling location, work stations);
- e. Provide a simplified block flow diagram of the monitoring system overlaying process or control device diagram (could be included in Source Description and Control Equipment Description);
- f. Provide a description of sensors and analytical devices (e.g., thermocouple for temperature, pressure diaphragm for flow rate);
- g. Provide a description of the data acquisition and handling system operation including sample calculations (e.g., parameters to be recorded, frequency of measurement, data averaging time, reporting units, recording process);
- h. Provide checklists, data sheets, and report format as necessary for compliance determination (e.g., forms for record keeping).

## 5. Support Testing and Data for Protocol Design

- a. Provide a description of field and/or laboratory testing conducted in developing the correlation (e.g., measurement interference check, parameter/emission correlation test plan, instrument range calibrations);
- b. Provide graphs showing the correlation, and supporting data (e.g., correlation test results, predicted versus measured plots, sensitivity plots, computer modeling development data).

#### 6. Initial Verification Test Procedures

- a. Perform an initial relative accuracy test (RA test) to verify the performance of the PEMS for the equipment's operating range. The PEMS must meet the relative accuracy requirement of the applicable Performance Specification in 40 C.F.R. Part 60, Appendix B. The test shall utilize the test methods of 40 C.F.R. Part 60, Appendix A;
- b. Identify the most significant independently modifiable parameter affecting the emissions: Within the limits of safe unit operation, and typical of the anticipated range of operation, test the selected parameter for three RA test data sets at the low range, three at the normal operating range and three at the high operating range of

- that parameter, for a total of nine RA test data sets. Each RA test data set should be between 21 and 60 minutes in duration;
- c. Maintain a log or sampling report for each required stack test listing the emission rate;
- d. Demonstrate the ability of the PEMS to detect excessive sensor failure modes that would adversely affect PEMS emission determination. These failure modes include gross sensor failure or sensor drift;
- e. Demonstrate the ability to detect sensor failures that would cause the PEMS emissions determination to drift significantly from the original PEMS value;
- f. The PEMS may use calculated sensor values based upon the mathematical relationships established with the other sensors used in the PEMS. Establish and demonstrate the number and combination of calculated sensor values which would cause PEMS emission determination to drift significantly from the original PEMS value.

### 7. Quality Assurance Plan

- a. Provide a list of the input parameters to the PEMS (e.g., transducers, sensors, gas chromatograph, periodic laboratory analysis), and a description of the sensor validation procedure (e.g., manual or automatic check);
- b. Provide a description of routine control checks to be performed during operating periods (e.g., preventive maintenance schedule, daily manual or automatic sensor drift determinations, periodic instrument calibrations);
- c. Provide minimum data availability requirements and procedures for supplying missing data (including specifications for equipment outages for QA/QC checks);
- d. List corrective action triggers (e.g., response tune deterioration limit on pressure sensor, use of statistical process control (SPC) determinations of problems, sensor validation alarms);
- e. List trouble-shooting procedures and potential corrective actions;
- f. Provide an inventory of replacement and repair supplies for the sensors;
- g. Specify, for each input parameter to the PEMS, the drift criteria for excessive error (e.g., the drift limit of each input sensor that would cause the PEMS to exceed relative accuracy requirements);
- h. Conduct a quarterly electronic data accuracy assessment tests of the PEMS;

i. Conduct semiannual RA tests of the PEMS. Annual RA tests may be conducted if the most recent RA test result is less than or equal to 7.5%. Identify the most significant independently modifiable parameter affecting the emissions. Within the limits of safe unit operation and typical of the anticipated range of operation, test the selected parameter for three RA test data pairs at the low range, three at the normal operating range, and three at the high operating range of that parameter for a total of nine RA test data sets. Each RA test data set should be between 21 and 60 minutes in duration.

## 8. PEMS Tuning

- a. Perform tuning of the PEMS provided that the fundamental mathematical relationships in the PEMS model are not changed.
- b. Perform tuning of the PEMS in case of sensor recalibration or sensor replacement provided that the fundamental mathematical relationships in the PEMS model are not changed.